


February 2012



Mullins Rubber Products Expanded Site Inspection Report




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OHIO ENVIRONMENTAL PROTECTION AGENCY (OHIO EPA)
DIVISION OF ENVIRONMENTAL RESPONSE & REMEDIATION (DERR)

EXPANDED SITE INVESTIGATION (ESI) REPORT
for

Mullins Rubber Products, Inc.
Montgomery County
U.S. EPA ID OHN000510489

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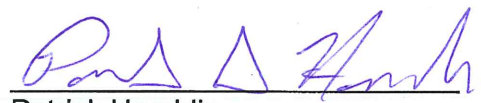
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EXPANDED SITE INSPECTION (ESI) REPORT

For

**Mullins Rubber Products, Inc.
Dayton, Montgomery County, Ohio
U.S. EPA ID: OHN000510489**

**OHIO ENVIRONMENTAL PROTECTION AGENCY
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February 2012

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1.0 EXECUTIVE SUMMARY

The Ohio Environmental Protection Agency (Ohio EPA) Division of Environmental Response and Revitalization (DERR) entered into a cooperative agreement with the United States Environmental Protection Agency (U.S. EPA) Region V to conduct an Expanded Site Inspection (ESI) of the Mullins Rubber Products (MRP) site, located in Riverside, Montgomery County, Ohio. The purpose of this report is present the analytical data and determine if a release has occurred at MRP.

The work plan for the ESI was approved by U.S. EPA on December 8, 2011. A total of twenty-nine laboratory samples were collected during the ESI. The majority of the samples were collected from December 13 through December 15, 2011. Three Geoprobe™ (geoprobe) monitoring wells installed during the ESI were sampled on December 19, 2011. Samples collected on the MRP facility included six soil samples, three monitoring well samples, the active deep production well, a dry well and an out of service shallow production well. Samples collected off-facility included nine city of Dayton production wells, four residential well samples and two ground water samples from former residential wells, no longer in use. Samples were analyzed through the U.S EPA Contract Laboratory Program (CLP) for volatile organic compounds (VOCs). VOCs were the only contaminants of concern.

Sample results indicated significant levels of tetrachloroethene (PCE) and trichloroethylene (TCE) in several of the on-facility ground water monitoring wells, the deep production well currently used for non-contact cooling and the dry well sample. The nine city of Dayton public drinking water wells sampled are believed to be generally down-gradient of MRP. PCE and TCE as well as other VOCs were detected in several of these public wells. The highest concentration of PCE detected in the public wells was 1.5 µg/L;

the highest concentration of TCE found in private wells was 2.8 µg/L for ODNR well #917509.1,1,1-trichloroethane (TCA) was also detected at trace concentration at this location which is approximately 3,100 feet north-northwest of MRP and is considered to be up-gradient or side-gradient of MRP. PCE was detected at 0.2 µg/L in ODNR well # 125190. This location is about 550 feet west of MRP and may be down-gradient of the MRP. Both of the above wells are no longer used for drinking water. Ohio EPA believes that residential homes and businesses in the immediate area are all connected to public water.

MRP is pumping deep water contaminated with PCE and after being used for cooling in the manufacturing process, the water is discharged to shallow ground water through a series of Class V injection wells (dry wells) at the north end of the property. Because of this discharge to the dry wells, a shallow groundwater release of VOCs can be attributed to MRP. Additionally, a separate source of PCE and/or of TCE in soils may exist at the MRP facility and could be affecting

ground water but the injection of contaminated deep ground water to shallow ground water makes it impossible to make a determination at this time.

2.0 SITE BACKGROUND

2.1 Site Description

Mullins Rubber Products, Inc. (MRP) is an active manufacturing facility located at 2949 Valley Pike in Riverside, Montgomery County, Ohio. See **Figure 1, Site Location Map** and **Figure 2, Aerial Photograph** located in **Appendix A**. MRP is located in a mixed industrial and residential area of Riverside. MRP is bordered to the west by Paul's Garage and Towing Inc., to the east by a residence and Harshman Self Storage, to the north by Old Dominion Freight Lines, Inc., Dayton Terminal, and to the south by Valley Pike. Other local residences are found along Hypathia Avenue, approximately 500 feet west of MRP and the mobile home park located across Valley Pike, southwest of MRP.

The MRP facility sits on a single parcel (Parcel I39002030048) and is comprised of 3.675 acres. Most of the parcel is covered with buildings and asphalt or concrete. There is a small grassy area in the front parking area, a vegetative swale in the northern corner of the site, and a small strip of grass along the back fence line.

The primary product manufactured at MRP is molded heavy-duty truck/trailer suspension bushings. Currently, there is one main building and several small storage sheds on site. There are four production wells at MRP that have been used for non-contact cooling water. The well currently in use is 120 feet deep and produces about 250 to 300 gallons of water per minute for 8 hours a day. There are two production wells of unknown depth which are used as back-up wells. The fourth shallow (50 foot) well is damaged and no longer used but remains in place. This well was sampled and surveyed in the same manner as were the monitoring wells and is referred to as GW-2 in this report.

There are seven dry wells located at the facility which are shown on **Figure 3, Underground Drainage System Map**. Dry wells DW-1, through DW-5 are interconnected and flow cascades from DW-1 to DW-5 at the northeast corner of the property. DW-1 receives storm water runoff. DW-2 receives non-contact cooling water from the two TCE degreasing tanks. DW-3 receives non-contact cooling water discharges from five rubber mixing mills. DW-4 contains sump pumps to raise water elevation towards DW-5. Flow past DW-5 moves underground into a man-made depression at the northeast corner of the property. During ESI activities no ponding of water occurred in the depression even during rain events. The remaining dry wells, DW-6, and DW-7, receive storm water runoff.

All of the dry wells are considered Class V injection wells under the Ohio

Underground Injection Control (UIC) Program. No permits are needed and the wells are properly registered with Ohio EPA. However, in a letter dated February 9, 2012, the UIC program informed MRP that Ohio Administrative Code (OAC) Rule 3645-34-07 prohibits the injection of any fluids into an underground source of drinking water with any contaminants above primary drinking water standards. MRP has been advised to sample non-contact cooling water at a location just prior to injection into the Class V well(s) within 90 days of the letter. In addition, during the UIC inspection on January 17, 2012, MRP was informed that they needed to develop a plan of action that would eliminate discharges of contaminated water to the injection wells altogether (send to sanitary sewer) or which would reduce concentrations of contaminants to below the primary drinking water standards (treatment) if the use of the injection wells were to continue.

MRP is located approximately 1,300 feet north of the Dayton Mad River Well Field protection area five-year time of travel delineation and 1,500 feet southeast of the Dayton Miami Well Field wellhead protection (WHPA) area five-year time of travel delineation. The closest production well is PW-06, approximately 2,650 feet south of the facility in the Mad River Well Field.

2.2 Site History

MRP began operations in 1942 as The Mullins Tire and Rubber Company. The primary operation at that time was retreading used tires. Other names the company used during its history include The Yellow Front Tire Shop and Bill Mullins Co. Inc.

In 1955, the business expanded from tires into molding different types of rubber products. Beginning in the mid-1960s, the company focused on molding heavy-duty truck trailer suspension bushings, the product line that continues today.

MRP is required to report halogenated solvent usage annually to the Regional Air Pollution Control Agency (RAPCA). After an anonymous source alleged the company was under-reporting the amount of solvents used, the Ohio EPA and RAPCA performed an unannounced inspection on May 14, 2001.

RAPCA and Ohio EPA determined that MRP had under-reported their TCE usage, kept false records and knowingly reported false data from 1995 to 2000. From 1995 to 1999, the combined emissions permit limit was 10,000 pounds per year. Actual emissions were calculated and ranged from 17,679 pounds in 1996 to 38,556 pounds in 1997.

In January of 2004, a seven-count criminal indictment was filed against MRP by the U.S. Attorney's Office in Dayton, Ohio.

Later the same year, William R. Mullins, President of MRP pled guilty to making false statements when reporting airborne discharges of TCE and failing to submit a Title V air permit by the October 1996 deadline. Mr. Mullins was fined,

sentenced to home confinement, followed by probation, and ordered to perform 100 hours of community service.

MRP now holds a Clean Air Act Title V operating permit that was issued January 16, 2008. TCE usage limit is a facility-wide rolling 12 month limit of 15.54 tons.

A Site Inspection (SI) of Mullins Rubber Products was conducted in November 2010. Six ground water grab samples were collected using the geoprobe direct-push technology. The main production well was sampled, along with dry well number DW-2, which receives cooling water from the TCE degreasing tanks.

Sample results indicated significant levels of tetrachloroethene (PCE) and lower levels of trichloroethylene (TCE) in three of the samples. PCE was detected at 156 µg/l and TCE was detected at 6.18 µg/l in the SI production well sample. Water from this production well enters a closed cooling system and is discharged to dry wells DW-2 or DW-3. The sample collected from DW-2 also contained PCE and TCE but at lower concentrations than in the production well sample. PCE was detected at 77 µg/l and TCE was detected at 2.2 µg/l in the sample dipped out of DW-2. PCE and TCE were detected in a shallow geoprobe ground water grab sample collected in the southwest corner of the site. PCE was detected at 58 µg/l and TCE at 11µg/l at this presumable down-gradient location.

2.3 Geology and Hydrogeology

Regional Geology & Hydrogeology

Regionally, unconsolidated glacial deposits overlie consolidated bedrock. Most of the bedrock in the Dayton area consists of Ordovician shales with thin interbedded limestones (Richmond Group). In upland areas, the Richmond Group is overlain by the Brassfield Limestone which is Silurian in age. A contact between the two formations is observed at the southeast end of Huffman Dam, approximately two miles east of MRP.

The unconsolidated deposits are glacial sediments consisting of fine-grained tills and sand and gravel outwash deposits. The tills are relatively impermeable and yield little water. In the Mad River valley, downstream of Huffman Dam, the outwash deposits are separated into upper and lower zones by a till layer which can be locally continuous but is discontinuous regionally. Ohio EPA review of Dayton early warning monitoring well logs indicates that the till layer is not present at some locations within the valley near MRP. These “windows” in the till layer provide localized interconnection between the upper and lower sand and gravel outwash deposits.

MRP is located over the Mad River buried valley aquifer system one of the most productive aquifers in North America. It is part of the U.S. EPA designated Great Miami Buried Valley Sole Source Aquifer System. The ground water resources map for Montgomery County indicates that regionally extensive, thick permeable deposits of sand and gravel occur in this area. The aquifer is comprised of sand

and gravel outwash deposits ranging in thickness from 120 to 250 feet. In some locations, inter-bedded clay, silt, and clay-rich till aquitards at varying depths separate the aquifer into an upper and lower zone. One such clay-rich till aquitard is present below MRP.

Topographic data and regional hydrogeological information from the Mad River Well Field Assessment (Geraghty and Miller, 1987) indicate that ground water flow in the vicinity of MRP is south to southwest. **Figure 4, Regional Ground Water Flow Map** shows regional ground water flow. The facility is located approximately 1,350 feet north of the Dayton Mad River Well Field WHPA five-year time-of-travel delineation and approximately 3800 feet north of PW-02R, the closest public well located due south. **Figure 5, Dayton Production Well Sample Location Map** shows these features.

Site-Specific Geology & Hydrogeology

In the vicinity of MRP, the upper zone is unconfined while the lower portion acts as a semi-confined aquifer. According to three Ohio Department of Natural Resources (ODNR) on-facility well logs, the subsurface beneath MRP is heterogeneous, with outwash transected by clay-rich glacial till “blue clay” at varying depths. The blue clay is identified in the primary production well log between 51 and 116 feet bgs and at 47 to 111 feet bgs at a second but unknown well location. This unidentified well is presumably one of the two back-up production wells or an old abandoned well, all of which are located on the east side of MRP. The well log for shallow well GW-2 identifies blue clay at 25 to 37 feet bgs.

Estimated yields for buried valley outwash sediments in the property area range from 100-500 gallons per minute (gpm). Most wells in this area are completed in the outwash deposits because of the high permeabilities found in these deposits. Well yields as much as 2000 gallons/minute have been reported in the coarse sand and gravels of the Mad River buried valley aquifer (Dumouchelle et al, 1993).

Table 1 Well Survey and Water Level Data					
Point ID	Northing	Easting	Depth to Water	TOC Elevation	Ground Water Elevation
MW-1\PZ-1	658984	1509679	17.25	782.252	765
MW-2\PZ-2	659132	1509928	20.74	783.601	762.86
MW-3\PZ-4	658545	1510006	21.29	780.789	759.5
GW-2 (Old shallow Production Well)	658904	1510047	25	784.33	759.33
Coordinate System Ohio State Plane South 1983 (feet): NAVD 88					

Shallow ground water flow mapped using MW-2, GW-2 and MW-3 is shown on **Figure 6, On-Facility Ground Water Flow Map**. Apparent ground water flow depicted using these three wells is essentially north to south but seems to have an eastward trend in the southern part of MRP property. However, measuring ground water flow from only these three wells has limitations because MW-2, GW-2 and MW-3 form such a narrow triangle that it is difficult to predict true ground water flow around MRP. There is certainly a north to south component to ground water flow but the east to west component may not be accurate due to the lack of spread between these wells.

It should also be noted that the water level in MW-2 is 3.53 feet higher than the water level in GW-2. Water levels were measured during normal business hours at MRP and the water level in MW-2 is probably high due to ground water mounding caused by discharges to the dry well system at the north end of MRP. MW-2 is close to where DW-5 discharges directly to the shallow sand and gravel unit. During ESI activities continuous water flow could be heard in DW-5. Water levels were not collected when facility operations were shut down.

MW-1 was not used for ground water flow mapping because it does not appear to be screened in the main shallow sand and gravel unit due to boring termination at 26.5 feet bgs in clay-rich till. MW-1 appears to be connected to ground water from one or more small sandy lenses found in the clay-rich till. Ground water can enter MW-1 from the top of the sand pack at approximately 20.5 feet bgs to the bottom of the screen at 26.5 feet bgs. Ground water in MW-1 appears to be “perched” and not representative of water levels in the main shallow sand and gravel unit.

2.4 Potential VOC Sources

MRP has a long history of use of TCE in its manufacturing processes. While it is possible that MRP is a source of TCE through releases to soils, ESI sampling did not confirm that MRP was a source of TCE except through the discharges of VOC contaminated deep groundwater to dry wells and the shallow aquifer. ESI soil sampling was limited to outdoor sample locations which did not allow evaluation of what is beneath the buildings. Sub-slab vapor sampling or sub-slab soil sampling was not accomplished to screen for sources beneath the buildings. Most of the west side of MRP was not sampled during the SI and the ESI because of physical access limitations along that property line and reluctance to expand either investigation beyond MRP property. Because of the limited west side sampling, no information was obtained to indicate where the highest concentrations of VOCs are leaving the property in ground water along the west property line.

Discharging the VOC contaminated non-contact cooling water from the deep production well(s) to the dry well series, DW-1 through DW-5, changes local ground water flow in shallow ground water at the north end of MRP and spreads contaminants in the shallow ground water. The well log for GW-2 indicates that this 50 foot well was used for return of non-contact cooling water into shallow ground water. While GW-2 is no longer used for this purpose, historical use may have introduced contaminants into shallow ground water along the east side of MRP.

PCE use at MRP has not been documented. The source of PCE in the deep sand and gravel unit appears to be coming from an off-property source. Deep aquifer sampling was beyond the capability of the Ohio EPA geoprobe at MRP. No information was collected to allow evaluation of the source of PCE in the deep aquifer.

MRP is situated in a mixed residential, commercial and light industrial area. Harshman Road runs north to south approximately 700 feet east of MRP. There are commercial businesses on Harshman Road that could be potential VOC sources depending on current or past operations and direction of ground water flow in the shallow and deep sand and gravel units. However, Ohio EPA historical research (**Appendix B**) was unable to document any likely source properties along Harshman Road based on common uses of PCE or TCE such as dry cleaning or metal fabrication.

Freight company hubs and other businesses on Transportation Road north of MRP could also be potential VOC sources since they appear to be up-gradient of MRP based on the three wells Ohio EPA was able to use for ground water flow direction in the shallow sand and gravel (MW-2, GW-2 and MW-3). Concentrations of PCE in MW-1 and MW-2 are likely related to discharges to the dry wells rather than from a source to the north. No TCE was detected in these

wells and PCE concentrations are lower than those found in the MRP deep production well.

Paul's Garage and Towing is adjacent to MRP on the west side. PCE and/or TCE use is possible in automotive repair. Based on regional ground water flow to the south/southwest, Paul's Garage and Towing would be considered to be down-gradient of MRP. However, apparent local shallow ground water flow at MRP shows an eastward trend which makes Paul's Garage and Towing a potential source of VOCs found on MRP property. Properties south of MRP along Valley Pike are not likely to be sources of the VOCs at MRP.

3.0 SAMPLING LOCATIONS & DISCUSSION OF RESULTS

3.1 General Discussion

A total of twenty-nine laboratory samples were collected during the ESI. The majority of the samples were collected December 13 through 15, 2011. Monitoring wells and GW-3 were sampled the following week on December 19, 2011. On-facility samples include six soil samples, three monitoring well samples, the active production well, a dry well and an out of service production well. Samples collected off-site include nine city of Dayton production wells, four residential wells and two ground water samples that were former residential wells. Because of the geologic conditions on site, two of the planned six monitoring wells could not be installed. A third location near the front loading dock was not attempted due to Mr. Mullins denying access because the location would interfere with company operations.

In addition to the laboratory samples, fifty-two field screening samples were collected and analyzed with the Ohio EPA's mobile lab. These samples were screened with a PID and an aliquot was analyzed with a Photovac Voyager Gas Chromatograph (GC). The sample results for the mobile lab analysis can be found in **Appendix C**.

Standard quality assurance and quality control (QA/QC) procedures for site inspection field activities were followed during the investigation. These procedures, including sample collection, packaging and shipping, and equipment decontamination, are documented in the "Quality Assurance Project Plan (QAPP) for Region 5 Superfund Site Inspection activities for Ohio EPA and Ohio EPA Field Standard Operating Procedures."

The laboratory samples were analyzed by U.S. EPA Contract Laboratory Program (CLP) laboratories for volatile analysis only. The sample results are reported in micrograms per liter (ug/L) which is equivalent to parts per billion (ppb). The CLP data were reviewed by U.S.EPA Region 5 for compliance with the Contract Laboratory Program and validated by the Computer-Aided Data Review and Evaluation (CADRE) software package.

The CLP data package, including Form I and narratives, are contained in **Appendix D**. Under the Hazard Ranking System (HRS) rule, results are considered significant if they are at least three times the background sample result and above the Contract Required Quantitation Limit (CRQL). The CRQLs can be found in **Appendix E**.

3.2 Soil Sampling

Twelve soil borings were completed at MRP using geoprobe direct push technology. Geoprobe boring locations can be found on **Figure 7, Geoprobe Soil Boring and On-Facility Well Location Map**. Soil borings with the prefix PZ were borings that were planned to be converted into monitoring wells. Each four foot soil core was opened and logged for lithology and screened with a photo ionization detector (PID). The geoprobe soil boring logs can be found in **Appendix F**.

Soil samples were collected from the cores approximately every two feet or where sampling was indicated due to visual observation or screening results. Soil samples were placed in a sealable plastic bag and taken to the Ohio EPA mobile laboratory for screening analysis. The mobile laboratory was located at MRP during field work on December 13 through 15, 2012. The bagged samples were warmed and screened with a photoionization detector (PID) and an aliquot was analyzed with a Photovac Voyager Gas Chromatograph (GC) after PID screening. Mobile Laboratory screening results are found in **Appendix C**.

Six soil samples were collected for CLP analysis. The only VOC detections were found in soil sample SO-3 which was collected from boring PZ-5A at the rear of the main building adjacent to dry well DW-1. The chemical 2-butanone, a common lab contaminant was detected in SO-3 at 10 µg/kg. PCE was also detected at a concentration of 100 µg/kg. Sample SO-3 was collected from the 16 to 20 feet bgs core. PCE detected in SO-3 is may be related to non-contact cooling water discharges to the dry wells. Water levels in DW-2 were about two feet bgs during ESI sampling and could leach into shallow soils in this area. A map of soil sample locations along with sample depths can be found in **Figure 8, Soil Sample Location Map**.

3.3 Monitoring Well Sampling

Three of geoprobe soil borings were converted into ¾ inch monitoring wells with five-foot pre-packed screens. MW-1 was installed in the northwest corner of MRP at a depth of 26.5 feet bgs where refusal was encountered in clay-rich till. MW-1 was screened from 21.5 to 26.5 feet bgs. The added sand pack extends approximately one foot above the top of the screen so ground water can enter MW-1 between 20.5 feet and 26.5 feet bgs. The log for this location indicates sediments were moist from 20 to 24 feet bgs. There was no recovery from 24 to 26.5 feet bgs but there was moisture on the drill rods, indicating an apparent

saturated zone within this interval. The screened interval is above the expected depth of the main shallow aquifer. Ohio EPA believes that ground water in MW-1 is from thin sandy seams in the clay-rich till and that it represents “perched” ground water. MW-1 is not screened in the same water bearing zone as MW-2, GW-2 or MW-3. MW-1 was purged dry during well development and sampling. PCE was detected in the sample collected from MW-1 at an estimated concentration of 0.35 µg/l.

MW-2 is located in the northeast corner of the site near DW-5. MW-2 is screened from 22.5 to 27.5 feet bgs. At this location sandy silt with gravel was present from 4 feet bgs to 27 feet bgs where wet clay-rich till was encountered. The boring was terminated due to refusal at 27.5 feet bgs. Depth to water in MW-2 was 20.74 feet bgs. It is unclear whether there is direct connection in this location between the sandy silt with gravel and the main shallow sand and gravel aquifer found elsewhere at MRP between 47 and 51 feet bgs. However, the sandy silt with gravel is apparently conductive enough to allow the dry well discharges to soak into the subsurface without reaching the surface of the stormwater detention depression located beyond DW-5 and next to MW-2. PCE was detected in the sample from MW-2 at an estimated concentration of 23 µg/l and TCE was detected at an estimated concentration of 0.28 µg/l. These concentrations are apparently due to the dry well discharges.

MW-3 is located in the southwest corner of the site next to Valley Pike. MW-3 well is screened from 31 to 35 feet bgs. Sand and gravel and silty sand with gravel were encountered between 16.5 and 35 feet bgs. The depth of water was 21.29 feet bgs. MW-3 is believed to be the most down-gradient well and sampling location at MRP. PCE was detected in the sample from MW-3 at a concentration of 300 µg/l and TCE was detected at a concentration of 22 µg/l. Concentration of both PCE and TCE were significantly higher than those at this location during the SI using temporary geoprobe ground water sampling techniques. Since concentrations of PCE in the deep production well have not been as high as what was detected in the sample from MW-3, it is possible that a shallow as well as a deep source of PCE are present at MRP or the surrounding area.

Because the geoprobe was unable to penetrate the clay-rich till to a suitable depth on the east side of MRP near the inactive production wells, a monitoring well could not be installed. In lieu of a monitoring well, GW-2, a six inch well designated as a return well that is no longer in service, was used for sampling and for water level measurements and surveying. The total measured depth was 48.7 feet and the depth to water was 25 feet. PCE was detected in the sample from GW-2 at an estimated concentration of 9.5 µg/l. TCE was detected at an estimated concentration of 0.47 µg/l. **Table 2** provides a summary of the monitoring well analytical results. **Figure 7, Geoprobe Soil Boring and On-Facility Well Location Map** shows the locations of wells sampled at MRP.

Table 2 Monitoring Well Analytical Summary												
Sampling Location :	MW-1		MW-2		MW-2 diluted		MW-3 diluted		GW-2		MW-5 Dup of MW-2	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor :	1.0		1.0		2.0		40		1.0		1.0	
Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Carbon disulfide	0.29	J										
Methyl tert-butyl ether	0.46	J										
Toluene	0.25	J										
Trichloroethene			0.28	J			22		0.47	J	0.22	
Tetrachloroethene	0.35	J	23	J	25		300		9.5	J		

3.4 MRP Production and Dry Well Sampling

Both the active production well and dry well DW-2 that receives non-contact cooling water from the TCE tanks, were sampled as part of the ESI. According to its ODNR well log, the production well is approximately 120 feet deep and is screened beneath approximately 60 feet of clay-rich glacial till. William Mullins, Jr., stated that the well produces up to 250-300 gallons of water per minute and is used for 8 hours during each work day.

PCE was detected in the production well sample at a concentration of 64 µg/l and TCE was detected at a concentration of 0.51 µg/l. This well was sampled during the SI investigation in 2010. Concentrations of PCE and TCE in the 2010 SI sample were more than double ESI concentrations. During the 2010 SI PCE was detected at 156 µg/l and TCE was detected at 6.18 µg/l in the production well.

Water from the production well enters a closed cooling system and is discharged to dry wells DW-2 or DW-3. PCE and TCE were detected in the sample from dry well DW-2 at concentration of 76 µg/l and 1.4 µg/l, respectively. This is consistent with the SI results where PCE was detected at 77 µg/l and TCE was detected at 2.2 µg/l. At the time of sampling, the water level in DW-2 was approximately two feet bgs. The inflowing water was very warm. The sample was collected from the open well using a stainless steel bowl. Water from the bowl was poured into the sample containers. During the ESI there were no sampling locations between the vapor degreaser condenser coils and DW-2 or the roller mills and DW-3. In the February 9, 2012, letter, the Ohio UIC program advised MRP to sample non-contact cooling water at locations just prior to injection into the Class V well(s) within 90 days of the letter. Presumably future assessments will be able to utilize these new sampling locations.

3.5 Local Area Well Sampling

Four residential well samples and two ground water samples from wells no longer used for potable purposes were collected in the vicinity of MRP. Locations of these samples can be found on **Figure 9, Off-Site Well Sample Location Map**. All of the wells sampled have well logs that can be found in **Appendix G**.

Residential well sample number RW-1 was collected at 3464 Spicewood Drive, a rental home that serves three people. No VOCs were detected in sample RW-1. Sample RW-2 was collected at the Brantwood Baptist Church, located at 2400 Albrecht Avenue. The chemical 1,1,1-Trichloroethane was detected at 0.87 µg/l in RW-2, which is a transient non-community public water system serving a population of 150 members. RW-3 was collected at First Dayton Freewill Baptist Church located at 1661 Brandt Pike. No VOCs were detected in the sample from RW-3. RW-3 is a transient non-community public water system serving a population of 100 members. RW-4 was collected from ODNR well # 664691 which serves two people. No VOCs were detected in RW-4. RW-1 and RW-4 represent background conditions.

Two ground water wells not used as a potable water supply were also collected. Sample number GW-1 was collected from ODNR well # 125190, west of MRP. This well is located at a residence but is only used for landscape irrigation. PCE was detected in GW-1 at an estimated concentration of 0.20 µg/l. Sample GW-3 was collected from ODNR well # 271345 in the yard of a home located, southwest of MRP. This well has a removable top and is not used. There was a pipe in the well that was once part of a hand pump that prevented proper measurement and purging. A grab sample was collected with a bailer. VOCs were not detected in GW-3.

3.6 Dayton Production Well Sampling

Samples were collected from nine City of Dayton production wells. The location of these wells can be found on **Figure 5, Dayton Production Well Sample Location Map**.

The sample results are similar to the historic data for these wells provided by Dayton. Six of the eight production wells had detections of VOCs also found at MRP. The results can be found in Table 3. Because wells samples are across the Mad River, there might be other sources for the TCE and PCE found in these wells. However, these wells are at least regionally down-gradient of MRP and there appears to be aquifer connectivity between MRP and these Dayton Mad River Well Field wells. ESI data cannot rule out MRP as a potential source of VOCs affecting these wells.

Table 3
Public Well Analytical Summary

Sampling Location :	PW-3		PW-7		PW-8		PW-9		PW-42	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Chloroform										
1,1-Dichloroethane										
1,1,1-Trichloroethane										
Trichloroethene							2.8			
Tetrachloroethene					1.5					
Sampling Location :	PW-43		PW-44		PW-45		PW-46			
Units :	ug/L		ug/L		ug/L		ug/L			
Dilution Factor :	1.0		1.0		1.0		1.0			
Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
Chloroform							0.36	J		
1,1-Dichloroethane	0.42	J								
1,1,1-Trichloroethane	0.73				0.49	J	1.4			
Trichloroethene	0.55				0.25	J	0.87			
Tetrachloroethene	0.65		0.27	J	0.54		0.65			

4.0 MIGRATION PATHWAYS

4.1 Soil Exposure Pathway

MRP is located in a mixed light industrial, commercial and residential area in Riverside. The MRP facility is mostly covered by buildings and asphalt parking areas, with some grassy areas. Three sides of the site are surrounded by a maintained fence. The front of the site is secured by a chain gate. The site is accessible by persons on foot during business hours. Opportunity to come in direct contact with VOC contaminated soils is minimal.

There are currently about 39 employees at MRP. There are no resident individuals within 200 feet of an area of contamination. The nearby population within one mile is 5,711. 2000 census information can be found in **Table 4**. The soil exposure pathway is not believed to be significant at MRP.

The estimated population according to the 2000 census is provided on Table 4, below.

Table 4 2000 Census Data	
Radius	Population
0 - 1/4	423
1/4 - 1/2	1,297
1/2 - 1	3,991
1-2	15,323
2-3	37,833
3-4	51,544
Total	110,411

4.2 Ground Water Pathway

The ground water pathway is the main pathway of concern. The site is located approximately 1,350 feet from the Dayton Mad River Well Field wellhead protection area and 1,600 feet from the Dayton Miami Well Field wellhead protection area. The closest production well is approximately 2,650 feet from MRP in the Dayton Mad River Well Field.

Figure 6, Regional Ground Water Flow Map shows the regional ground water flow of the Mad River Buried Valley Aquifer. The contours indicate the flow of ground water generally to the south or southwest relative to MRP. **Figure 6, On-Facility Ground Water Flow Map** shows local shallow ground water flow at MRP.

The city of Dayton obtains its drinking water solely from ground water sources. There are four community drinking water systems within the four-mile radius target distance limit (TDL). The closest well within the Dayton Mad River Well Field is located 0.36 miles south of MRP. The closest well within the Dayton Miami Well Field is located 1.35 miles northwest of MRP. The two Dayton well fields collectively serve approximately 420,000 people. According to Dayton, each well serves approximately the same percentage of the total population. The Huber Heights South community system is located approximately 2 miles to the northwest and serves 1,880 people.

4.3 Surface Water Pathway

Runoff from the MRP site flows into a storm water sewer system and discharges into the Mad River. The Mad River flows into the Great Miami River approximately 3 miles downstream. The 15-mile TDL ends in the Great Miami River near the city of West Carrollton.

There is one state endangered species and one state threatened species within the TDL. The state endangered Plains Clubtail Dragonfly (*Gomphus Externus*) is located in the Mad River approximately 2.17 miles downstream of the site. The

state threatened Yellow-Crowned Night Heron (*Nyctanassa Violacea*) is located approximately 4.7 miles downstream from the site (**Appendix H**).

Both the Mad River and Great Miami River have fishable fish populations. There are no surface water intakes for drinking water within the TDL. The surface water pathway is not significant for MRP.

4.4 Air Pathway

The MRP site is an active manufacturing facility. Most of the land is covered with buildings or asphalt parking areas. There are some grassy areas that are maintained. The possibility of contaminants migrating as gas or particulates is low. Air emissions of VOCs at MRP are regulated by the Regional Air Pollution Control Agency (RAPCA). The air pathway is not considered to be significant at MRP.

5.0 SUMMARY

MRP is a rubber products manufacturing facility that has been active on this site since 1942. The company uses TCE in its manufacturing processes and in 2004, William R. Mullins, the company president, pled guilty to four counts of making false statements when reporting airborne discharges of TCE. Mr. Mullins also pled guilty to one count of failing to submit a Title V air permit by the October 1996 deadline.

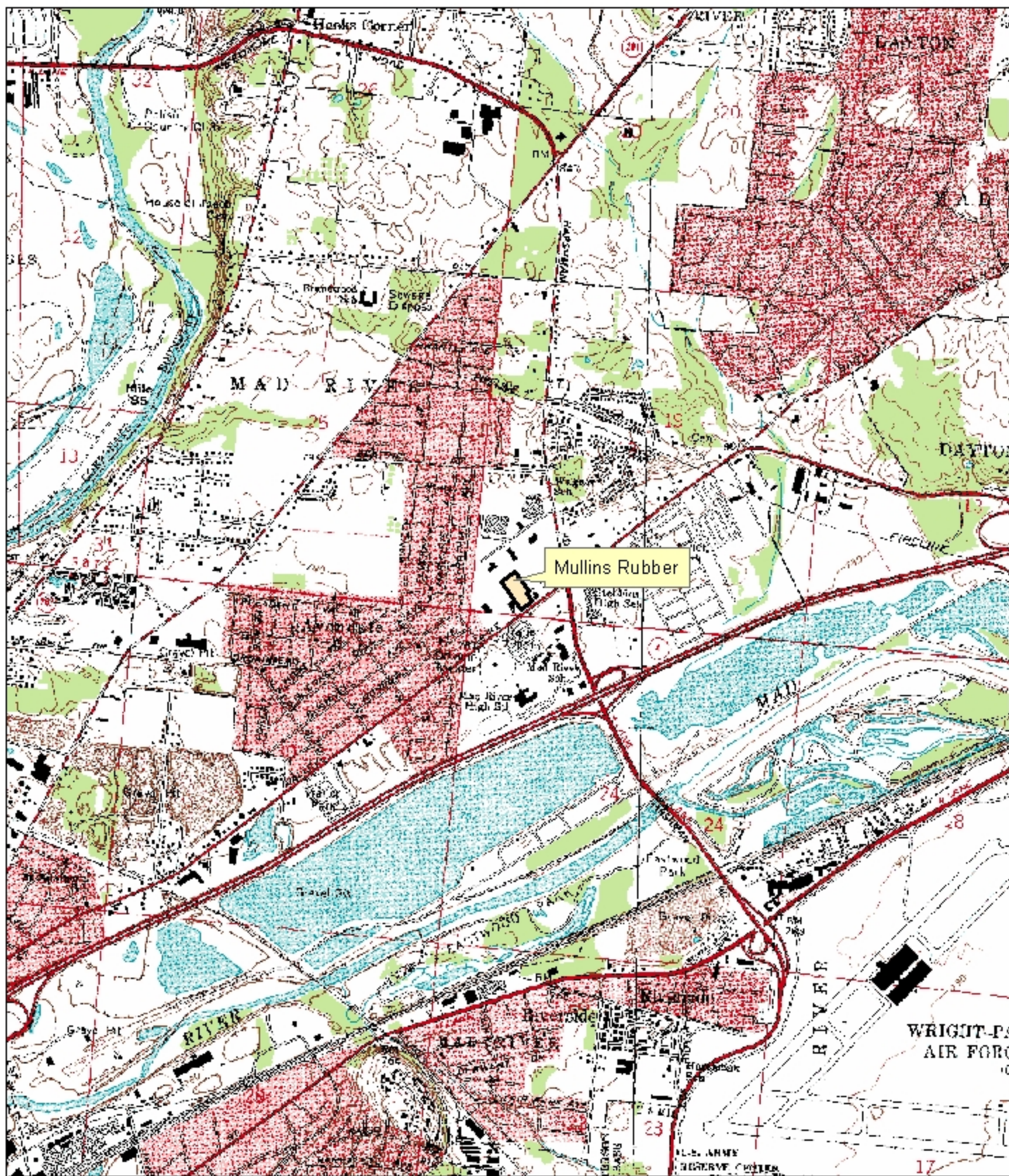
The site is located within 1,350 feet of two major well head protection areas for the city of Dayton, and approximately 2,650 feet from the nearest production well. Collectively, these two well fields serve over a half million people.

Sampling results show significant detections of TCE and PCE in shallow and deep ground water zones. The highest concentration of PCE in shallow ground water was 300 ug/L found in MW-3. The sample collected from MW-3 also had highest concentration of TCE, 22 ug/L. PCE and lesser amounts of TCE were detected in samples from both the MRP production well and the sample collected from DW-2.

SI and ESI sampling has not located the source or sources in soil of TCE and PCE found in shallow and deep saturated zones at MRP. Shallow groundwater at MRP is being contaminated by discharges of contaminated deep groundwater into the dry wells at the facility. Ohio EPA's geoprobe could not penetrate the clay-rich glacial till found at most boring locations in order to place wells in the shallow saturated zone during the ESI effort. Additional shallow and deep wells are needed to better determine contaminant concentrations and gradient in the shallow and deep ground water zones.

Appendix A

Figures



MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
USGS QUADRANGLE

FIGURE 1: SITE LOCATION MAP

Ohio Environmental Protection Agency

0 500 1,000 2,000 3,000 4,000
Feet

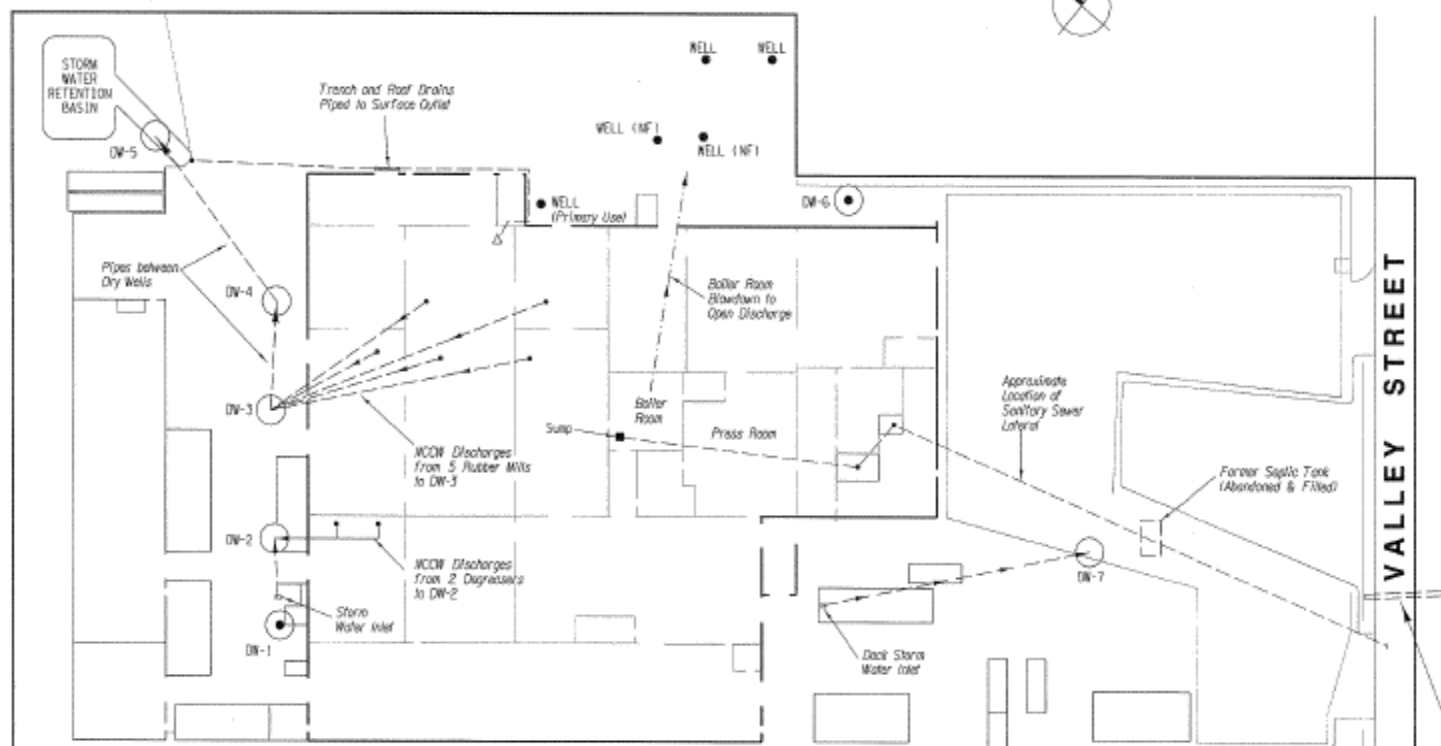


MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

FIGURE 2: 2005 AERIAL PHOTOGRAPH

Ohio Environmental Protection Agency

0 335 670 1,340 2,010 2,680 Feet



NOTES:

1. DW - DRY WELL; NCCW - NON CONTACT COOLING WATER.
2. BOILER BLOWDOWN CONSISTS OF ONLY SOFTENED WATER. NO CHEMICALS ARE ADDED TO THE WATER.
3. DW-2, DW-3 AND DW-4 HAVE CONCRETE COVERS AND DO NOT RECEIVE SURFACE WATER. DW-5 HAS A HIGH ELEVATION AND DOES NOT RECEIVE SURFACE WATER.
4. DW-7 HAS NO SURFACE INLET, BUT RECEIVES DOCK STORM WATER THROUGH AN UNDERGROUND PIPE.

STORM WATER
CULVERT
(12" DIA.) TO
UNPAVED
TRIBUTARY OF
WAD RIVER
(OUTFALL 001)

Figure 3- Underground Drainage System Map

Regional Ground Water Flow Map

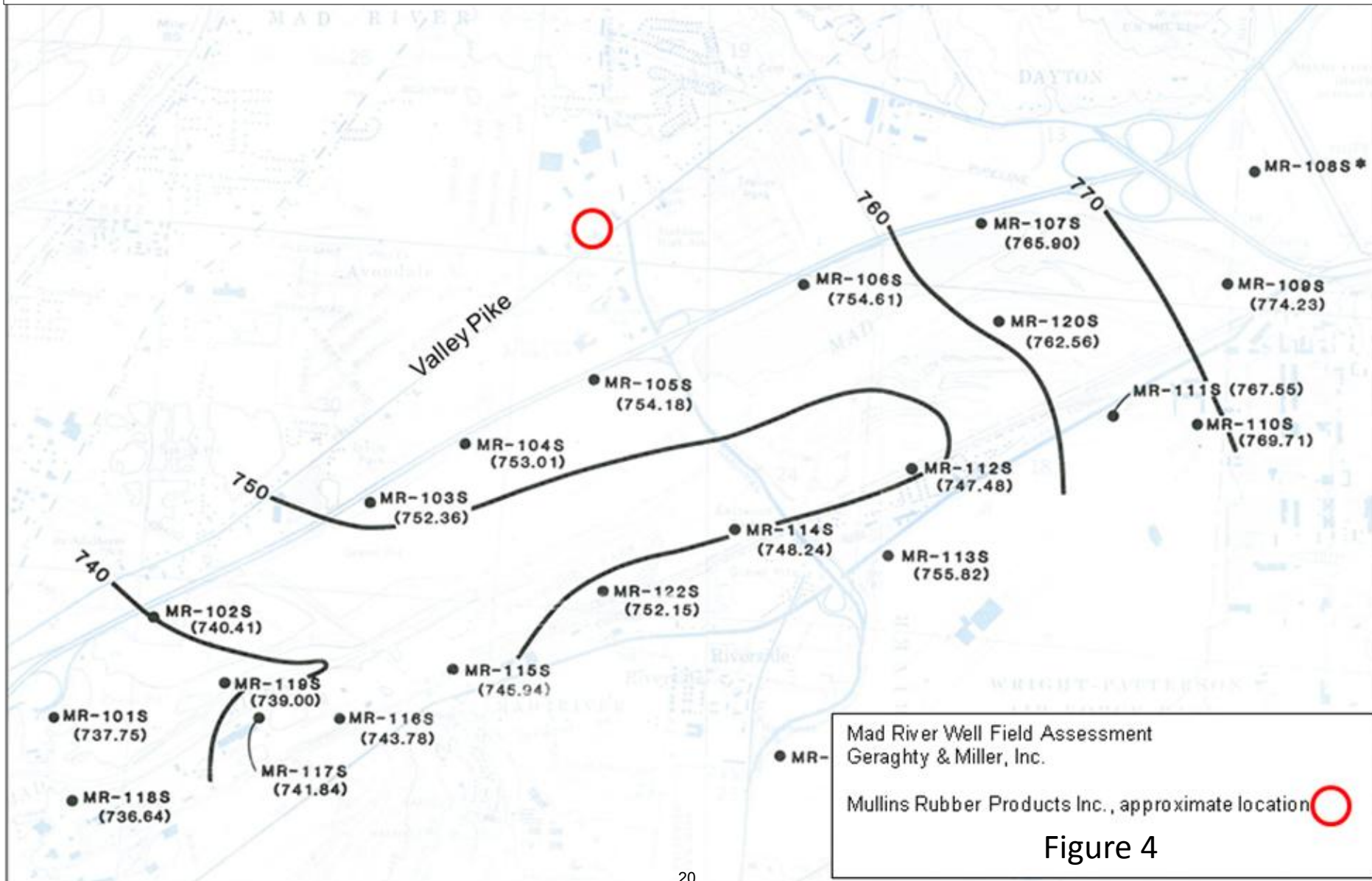
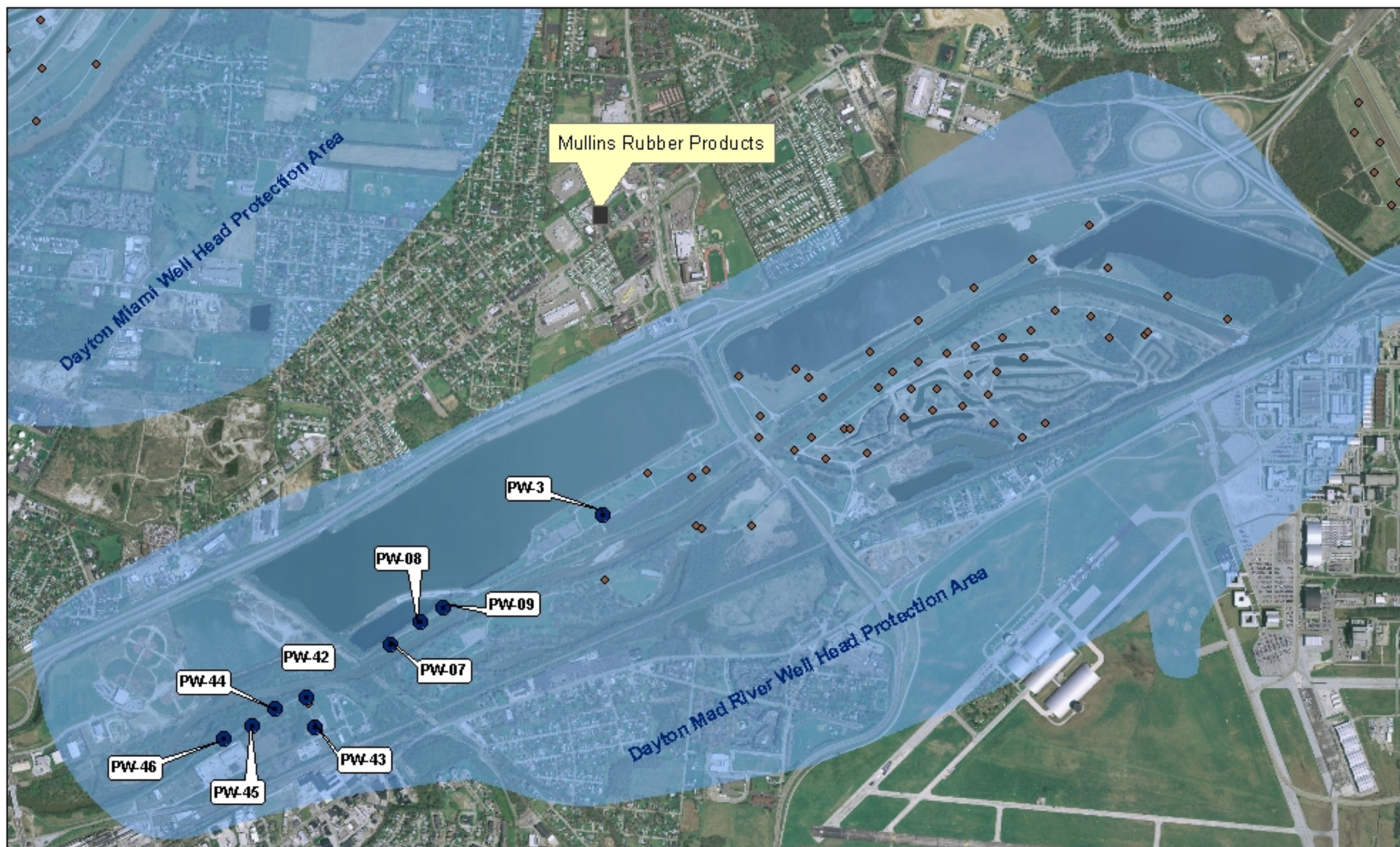


Figure 4



Legend

- Sampled Production Well
- Production Well

MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

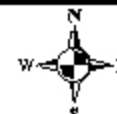


Figure 5: Dayton Production Well Sample Location Map

Ohio Environmental Protection Agency

0 500 1,000 2,000 3,000 4,000
Feet



Legend

- Monitoring Well Location

MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

FIGURE 6: On-Facility Ground Water Flow Map

Ohio Environmental Protection Agency

0 20 40 80 120 160
Feet



Legend

- ◆ Monitoring Well Location
- Soil Boring Location

MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

FIGURE 7: Geoprobe Soil Boring and On-Facility Well Location Map

Ohio Environmental Protection Agency

0 25 50 100 150 200
Feet



Legend

- ◆ Monitoring Well
- Soil Boring Location

MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

FIGURE 8: Soil Sample Location Map

Ohio Environmental Protection Agency

0 30 60 120 180 240
Feet



Legend

- Drinking Water Sample Location
- ▲ Ground Water Sample Location

MULLINS RUBBER PRODUCTS
RIVERSIDE, MONTGOMERY COUNTY, OHIO
AERIAL PHOTOGRAPH

FIGURE 9: Off-Site Well Sample Location Map

Ohio Environmental Protection Agency

0 245 490 980 1,470 1,960
Feet

Appendix B

Historical Research

Mullins Rubber Products Inc.



P.O. Box 24830 Dayton, Ohio 45424
Phone (937)233-4211 Fax (937)233-7836

[e-mail billmullins@mullinsrubber.com](mailto:billmullins@mullinsrubber.com)



In 1939 William (Bill) D. Mullins started a small re-cap shop in an old building in East Third Street in Dayton, Ohio. Someone, long before, had painted it yellow, thus the name. Bill was 30 years old, and had worked in other re-cap shops most of his life.

The good looking guy on the right is our founder, Bill Mullins. The elderly gentleman kneeling is his father, the current owners grandfather. Next is Bill's brother Jim, and the man on the left is lost to posterity, though he worked for Bill for many years.

In 1942, Bill bought a 130 acre farm on Valley Street in Dayton, moved the family into the farm house, and the re-cap operation into one of the barns. He changed the name to "Mullins Tire and Rubber Company".

For the next 12 years the re-cap business and the family grew. By 1954, cheap two and four ply tires were available, and most small re-cap operations in the country shut down. Bill saw it coming and had started to move into molded goods, getting closer to where we are today.

The business grew slowly, and for the next several years we molded anything and everthing that came along, gaining experience and knowledge about the molding industry as we went.

In the mid 1960's we began molding heavy duty truck trailer suspension bushings, and have been doing so ever since. We bring 60+ years in the rubber industry, and 40 years of specialized experience in suspension bushings.

Today the sons and grandson of Bill Mullins carry on the Mullins tradition of service and quality. We also have fathers and sons, brothers and sisters, and soon grandsons carrying on their own tradition of service and quality in our plant and office. We've come a long way from "The Yellow Front Tire Shop", but we always carry a bit of it with us.

Mullins Rubber Products Inc.



P.O. Box 24830 Dayton, Ohio 45424
Phone (937)233-4211 Fax (937)233-7836

[e-mail billmullins@mullinsrubber.com](mailto:billmullins@mullinsrubber.com)

Mullins Rubber Products was founded by William D. Mullins in 1939 and today employs over 75 people with over 60,000 sq. ft. of manufacturing at their Dayton, Ohio complex.

Mullins Rubber manufactures center bonded rubber bushings for virtually every heavy duty O.E. suspension manufacturer in the world.

Today Mullins products are preferred worldwide within the heavy-duty suspension market.

[Click here to learn the history of Mullins Rubber.](#)

[Home](#)[Mixing](#)[Metal Prep](#)[Molding](#)[Finishing](#)[Quality](#)

Mullins Rubber Products Inc.



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[Home](#)[Mixing](#)[Metal Prep](#)[Molding](#)[Finishing](#)[QC](#)

All of our parts are carefully trimmed and inspected for identification and quality.

In addition to our normal Quality Control Department in-process controls,(covered elsewhere) All parts are checked, double checked, and then checked again to make sure you get not only the right parts, but the best parts. Here Clyde Treser, The foreman of our Finishing and Shipping department cross checks a part to the drawing.

Mullins Rubber Products Inc.



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[e-mail billmullins@mullinsrubber.com](mailto:billmullins@mullinsrubber.com)



One of the things that make Mullins bushings superior to any competition, is the adhesion of the rubber to the steel or nylon liner.

Every piece of steel starts here with a vapor degreasing. This removes oil, sludge and grime. Roy Taylor, the foreman of the Adhesive Department, is show here removing a basket of steel inserts from one of our degreasers.

Roy and his crew, then grind or shot blast metal inserts to remove the scale and turn up "bright metal". After that, one of our specially designed adhesives is applied to the insert, and it's ready for molding.

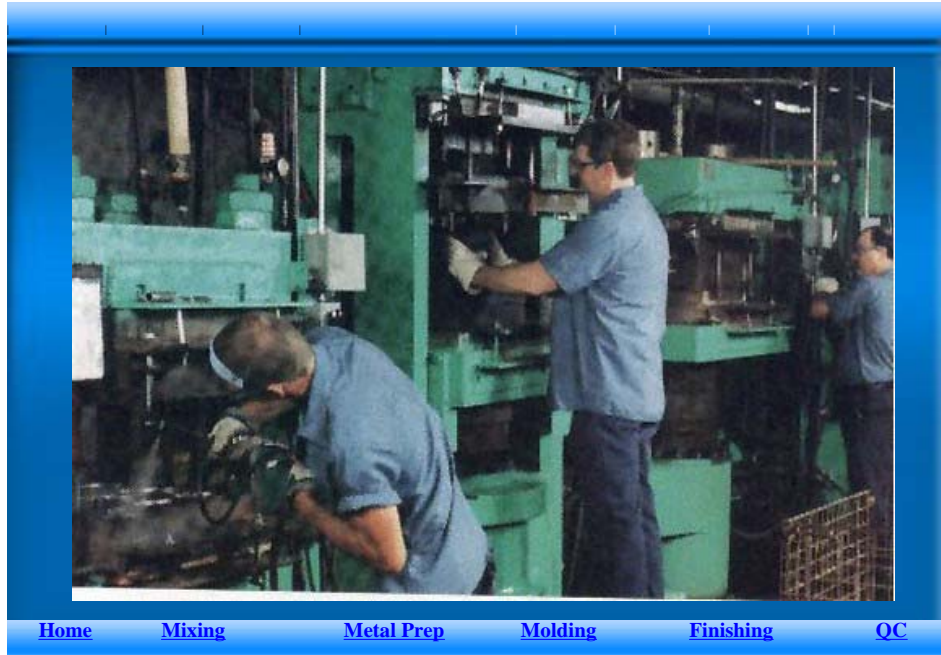
Incidentally, the only test of adhesion is a destructive one. We take a steel plate with a hole slightly bigger than the steel insert, using a hydraulic press we strip the rubber from the insert by pressing it through the hole. This is the best adhesive test we have found.

Mullins Rubber Products Inc.



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After the rubber has been mixed, and the inserts prepared with adhesive, they then have to be molded into bushings.

We use both transfer and compression molding processes ([Click here for information on molding](#))

Our presses are heated to 300 degrees F., and the rubber is placed under 1,800 PSI of pressure to form and cure the parts. During this process the rubber vulcanizes, and the adhesive bonds the rubber with the steel or nylon liner. Care must be taken to get a proper cure, and to "bounce" blisters out of the part.

The individuals in the picture are, in the center, Joe Caplinger who is one of our Quality Control foremen. On the right is Mark Patton, our Press Room foreman.

Mullins Rubber Products Inc.



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[e-mail billmullins@mullinsrubber.com](mailto:billmullins@mullinsrubber.com)



Mullins Rubber has a complete Quality Control Program. From feet on the floor, following every step of our production process, to state of the art computerized testing equipment.

We test incoming material, mixing, in-process, and finished inspection. We do destructive testing for adhesion. and whatever it takes to give you the best bushings possible.

In the picture, Charlie Patton, one of our QC Foremen is preparing to run a tensile and elongation test on a traditional but updated Scott Tester.

YES, WE ARE ISO 9001:2000



EAGLE Registrations Inc.



Newsroom

News Releases By Date

Ohio Rubber Company and President Plead Guilty to Clean Air Act Violations


Release date: 01/29/2004


Contact Information:


Suzanne Ackerman 202-564-7819 / ackerman.suzanne@epa.gov

(01/29/04) William R. Mullins, President of Mullins Rubber Products (Mullins Rubber) Inc., of Riverside, Ohio; and his company each pled guilty on Jan. 16 to violating the Clean Air Act (CAA). Mullins pled guilty to four counts of making false statements when reporting airborne discharges of a solvent containing TCE, which was used by the company to degrease machines. Mullins Rubber Inc. pled guilty to one count of failing to submit a CAA Title V air discharge permit by an October 1996 deadline. From 1998 to 2001 Mullins Rubber Inc., underreported the amount of this TCE solvent used at their facility and also failed to apply for required discharge permits. Falsely reporting the amount of solvents released into the air can cause air pollution levels that may cause distress to individuals with respiratory problems. The plea agreement calls for Mullins to pay a \$350,000 fine and provide an extra \$50,000 to the Pulmonary Medicine Division of Children's Medical Center in Dayton, Ohio. Mullins Rubber Inc. has agreed to pay a \$100,000 fine pursuant to its plea. Final acceptance of both pleas will be determined by the Court at the time of sentencing. The case was investigated by the Cleveland Area Office of EPA's Criminal Investigation Division, the Ohio Bureau of Criminal Identification and Investigation, the Ohio Environmental Protection Agency and the Regional Air Pollution Control Agency. It is being prosecuted by the U.S. Attorney's Office in Dayton.

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Attachment Two: Mullins Rubber Products, Inc. -- Site History

Mullins Rubber Products, Inc.

2949 Valley Pike
Riverside, Ohio 45404
Dayton suburb, Montgomery County

=====

Info Sources = Dayton & Suburban Polk Directories, select years from 1938 thru 1988 (last yr. available)

=====

1938 Dayton Polk Directory -- **Mullins Rubber Products** -- NOT MENTIONED
William (& Dorothy) Mullins = "laborer"

1942 Dayton Polk Directory -- **Mullins Rubber Products** -- NOT MENTIONED
925 East 3rd Street
William D. or H. (& Dorothy) Mullins = "used tires", "used"
[sometimes Polk provides different or wrong middle initial]

1947 Dayton Polk Directory -- **Mullins Rubber Products predecessor, Yellow Front, is mentioned**
William M. (& Dorothy) Mullins = "tire repairs"
"Yellow Front Tire Shop", 425 East 3rd Street *[425 is wrong street #; should be 925]*

1951& 1961 Dayton Polk Directory -- **Mullins Rubber Products or Yellow Front** -- NOT MENTIONED
"Sun Tire Co.", Harold Hibbert, 925 East 3rd Street; "Tire Dealers & Repairs"

1964 Dayton Polk Directory -- **Mullins Rubber Products** -- COMPANY NAME VERIFIED
2949 Valley Pike (Mad River Twp. 24) -- COMPANY ADDRESS VERIFIED
William Mullins; Tel. = 233-4211
"Manufacturers & Designers of Custom Molded Products", "Rubber Products"

1972 Suburban Dayton Polk Directory --
William D. (& Dorothy) Mullins; William = "President-Treasurer, Mullins Rubber"
Mullins Rubber Products, Inc.; 2949 Valley Pike (Mad River Twp.)
"Rubber Goods -- Retail"

1988 Suburban Dayton Polk Directory --
William D. (& Dorothy) Mullins; William = "President-Treasurer"
Mullins Rubber Products, Inc.; 2949 Valley Pike (Mad River Twp.) ; Tel. = 233-4211
"Rubber Products -- Retail"

1988 Suburban Dayton Polk Directory – (continued)

Different businesses around Mullins along Valley Pike; by street address from SW to NE:

2701 Valley Pk. – Strictly Sailing, Inc., “sailboats”

2714 Valley Pk. – 1. Drive-in Trailer Park
2. Wanda’s Cash & Carry Market

2801 Valley Pk. – Roadway Express, Inc, “motor freight”

2939 Valley Pk. – Paul C. Lovely, homeowner

2941 Valley Pk. – 1. Valley Auto Parts, “auto parts retail”
2. **Paul’s Garage, Inc., “auto repair” – [POSSIBLE ADD’L SOURCE?]**

2949 Valley Pk. -- Mullins Rubber Products, Inc.; Tel. = 233-4211

2992 Valley Pk. – D.K. Hatfield, homeowner-?

3049 Valley Pk. – Brethren in Christ Church

3081 Valley Pk. – Henry L. Sipkoski, homeowner

Valley Pk. – Intersection with Harshman Road (Mad River Twp.)

Attachment Two – REVISED, 2011/11/28: Mullins Rubber Products, Inc. -- Site History from Polk Directories

Info Sources = Dayton & Suburban Polk Directories, select years from 1970 thru 1988 (last yr. available)

=====

BUSINESSES ON VALLEY PIKE – Select businesses that could possible be sources around Mullins along Valley Pk. are listed below; by street address from southwest to northeast. Closer to Harshman Rd. & addresses above 2700 Valley Pk., info for every Valley Pk. address is provided, even if residential.

2300 Valley Pk. – 1. Gordon's Laundromat; "Laundries & Drycleaners" -- 1988
2. Law's Speed Queen Laundromat -- 1975 -- **[POSSIBLE SOURCE?]**

2449 Valley Pk. – 1. Dayton Iron & Metal Co.; "junk dealers" -- 1988, 1984, 1979-80, 1975, 1970

2501 Valley Pk. – 1. C.B. Combs Construction Co.; "home improvements" -- 1988
2. Valley Hardware -- 1984, 1979-80, 1975, 1970

2518 Valley Pk. – 1. Jim's Garage, "auto repairs". -- 1988, 1984, 1979-80
2. Vacant -- 1975
3. Branham Body Shop -- 1970

2531 Valley Pk. – 1. Kim's Valley Sohio Service -- 1988
2. Haddix Sohio Service -- 1984, 1979-80, 1975, 1970

2546 Valley Pk. – 1. Rose's Furniture; "new & used" -- 1975

2547 Valley Pk. – 1. J & B Independent Transmission Service -- 1988, 1984, 1979-80, 1975, 1970

2557 Valley Pk. – 1. A-1 Used, Inc.; "tires & auto parts". -- 1988
2. Vacant -- 1984
3. Car Wash Center -- 1975

2561 Valley Pk. – 1. Discount Tires and Tad Petrosky (new) -- 1979-80
2. Severs Union 76 Service or Pure Oil Service; Willard M. Severs -- 1975, 1970

2567 Valley Pk. – 1. A-1 Used, Inc.; (Additional space) -- 1988

Valley Pk. – Intersection with Pleasant Valley Ave. - - - - -

2633 Valley Pk. – 1. Wee Three Ceramic Shop -- 1988
2. Oplis B. Allen; homeowner -- 1984, 1979-80
3. Mrs. Maxine Nelson; homeowner -- 1975

2641 Valley Pk. – 1. Dimension Four; "manufacturing loud speakers" -- 1988, 1984
2. Valley Sewing Machine Co. -- 1979-80, 1975, 1970

2645 Valley Pk. – 1. Nelson Sign & Saw & Small Engine Repair; "engine service" -- 1988
2. Vacant -- 1984
3. Allied Fence Co.; "sales & installation" -- 1979-80, 1975
4. Bellbrook Fence Co.; "sales & installer" -- 1970

Valley Pk. – Intersection with Hypathia Ave. -----

2701 Valley Pk. – 1. Strictly Sailing, Inc., “sailboats” -- 1988, 1975
2. Valley Stone; 233-9122; Cruik Shank & Jim Bennett -- 1970
3. Vacant -- 1975

2909 Valley Pk. – 1. R. Donald Templeton; homeowner -- 1970

2714 Valley Pk. – 1. Drive-in Trailer Park -- 1988, 1975, 1970
[Streets in Trailer Park accessed from Mercury Dr. are: Jupiter, Bomarc,
Matador, Thor, Titan, Polaris & Saturn streets; Nike Ln.; and Quail Dr.]
2. Wanda's Cash & Carry Market -- 1988
3. L & L CarryOut -- 1975, 1970

2801 Valley Pk. – Roadway Express, Inc, “motor freight” -- 1988, 1975, 1970

Valley Pk. – Intersection with Mercury Drive -----

2939 Valley Pk. – 1. Paul C. Lovely; homeowner -- 1988, 1975
2. 1970 – Address not listed

2941 Valley Pk. – 1. Valley Auto Parts, “auto parts retail” -- 1988 [1970 – address not listed]
2. Paul's Garage, Inc., “auto repair” -- 1988, 1975 – **[POSSIBLE SOURCE?]**

2949 Valley Pk. -- Mullins Rubber Products, Inc.; Tel. = 233-4211 -- 1988, 1975, 1970

2992 Valley Pk. – 1. D.K. Hatfield, homeowner-? -- 1988
2. David Ramey; homeowner -- 1975
3. Donald E. Tracy; homeowner -- 1970

3049 Valley Pk. – Brethren in Christ Church -- 1988, 1975, 1970

3081 Valley Pk. – 1. Henry L. Sipkoski, homeowner -- 1988, 1975
2. Mrs. Frances Galeski -- 1975, 1970

3145 Valley Pk. – 1. Estridge I.G.A. Market -- 1970
2. Valley & Harshman Sinclair Service; “gas station” -- 1970
[This is the last address listed for Valley Pk.]

Valley Pk. – Intersection w/ Harshman Rd. (Mad River Twp.) -----

NOTE: For businesses along Valley Pk. & northeast of Harshman Rd., no info was provided by Polk Directories for Charlie Mac Dr., Intercity Dr., Wrightway Rd. & Gleason Dr.

NOTE: Also, for businesses along Valley Pk. & northeast of Harshman Rd.: Spicewood Dr., Butane Blvd., Encore Dr., Brio Dr., Country Haven Ct. & Union Schoolhouse Rd. were not researched at the O.H.S Archives.]

BUSINESSES ON HARSHMAN ROAD – Select businesses that could possible be sources around Mullins along Harshman Rd. are listed below; by street address from south to north. Closer to Mullins & north of Valley Pike from 1900-2200 Harshman Rd. , info for every address is provided, even if residential.

Harshman Rd. – Intersection with State Route 4; In 1970, the only addresses on Harshman Rd. listed between Valley Pike & S.R.4 were 1791, 1801, 1900 & 1910 Harshman Rd.

1791 Harshman Rd. – 1. Mad River Township Offices & Services: Fire, Road, Police, Central Dispatch, Trustees & Clerk -- 1988, 1984, 1979-80, 1975, 1970

1801 Harshman Rd. – 1. Mad River Middle School -- 1988, 1984, 1979-80, 1975, 1970

1830 Harshman Rd. – 1. Mad River Annex -- 1979-80, 1975

1831 Harshman Rd. – 1. Montgomery-Preble Youth Employment Program -- 1988, 1984
2. Miami Valley Regional Center for Handicapped Children -- 1988, 1984
3. County Board of Education – Division of Instructional Media -- 1988, 1984
[1975 – address not listed]

1891 Harshman Rd. – 1. Eight Inn of Dayton; “motel” -- 1988, 1984, 1979-80, 1975

1900 Harshman Rd. – 1. Walter E. Stebbins High School -- 1988, 1984, 1979-80, 1975, 1970

1910 Harshman Rd. – 1. Mrs. Anna Ginstie -- 1970

1929 Harshman Rd. – 1. Bob Evans Restaurant -- 1988 [1984 & 1979-80 – address not listed]

1975 Harshman Rd. – 1. Buckeye Pizza Hut -- 1988, 1984, 1979-80, 1975

1991 Harshman Rd. – 1. McDonalds Restaurant -- 1988, 1984, 1979-80, 1975

Harshman Rd. – Intersection with Valley Pike -----

2000 Harshman Rd. – 1. Super America; “gas station” -- 1988 [1984 & 1975 – address not listed]

2020 Harshman Rd. – 1. Milo-Japanese Restaurant -- 1988 [1984 & 1975 – address not listed]

2028 Harshman Rd. – 1. Genwakai Karate -- 1988 [1984 & 1975 – address not listed]

Harshman Rd. – Intersection with Transportation Road -----

2121 Harshman Rd. – 1. Morris Furniture Mart -- 1988, 1984, 1979-80, 1975

2141 Harshman Rd. – 1. Cornerstone Baptist Church -- 1988 [1984 & 1975 – address not listed]
2. Child-Adult Institute, Inc.; “family counseling” -- 1984, 1979-80

Harshman Rd. – Intersection with Beatrice Drive -----

2205 Harshman Rd. – 1. Edw. Chicketti; homeowner -- 1988
2. Granville T. Lyles; homeowner -- 1984
3. J.E. Harman; homeowner -- 1979-80
4. Hugh W. Magee; homeowner -- 1975

2221 Harshman Rd. – 1. Apostolic Lighthouse – United Pentacostal Church & School --
1988, 1984, 1979-80, 1975

2231 Harshman Rd. – 1. Vacant -- 1988, 1975
2. William S. Henry; homeowner -- 1984
3. R.L. Wagner; new homeowner -- 1979-80

Harshman Rd. – Intersections with Amsted Ln., Amston Dr. & Arrowrock Ave. -----

=====

**BUSINESSES ON TRANSPORTATION RD. – All businesses from southeast to east around Mullins
along Transportation Rd. are listed below by street address**

Transportation Rd. -- Intersection with 2185 Harshman Rd.; “Numbers irregular”

3154 Transportation Rd. – 1. Holland Motor Express, Inc.; “trucking” -- 1988, 1984
2. Cooper-Jarrett, Inc.; “motor freight” -- 1979-80, 1975, 1970

3141 Transportation Rd. – 1. Buschur’s Home Improvement Center, Inc. -- 1988, 1984, 1979-80, 1975

3118 Transportation Rd. – 1. Jones Transfer Co.; “motor freight” -- 1988, 1984
2. Halls Motor Transit Co.; “motor freight” -- 1979-80
3. Werner Continental Co.; “motor freight” -- 1975, 1970

3131 Transportation Rd. – 1. The Seven-Up Bottling Co. of Dayton -- 1988, 1984, 1979-80, 1975, 1970

3100 Transportation Rd. – Consolidated Freightways Corp. -- 1988, 1984, 1979-80, 1975, 1970

=====

NEAREST DRYCLEANER (NOT ON ABOVE STREETS) – APPROX. 3.1 miles north of Mullins:

5755 Old Troy Pike (S.R. 202) – Capital Dry Cleaning; “Laundries & Drycleaners” -- 1988

Polk Directory Info for Mullins Rubber Products, Inc.

2949 Valley Pike
Riverside, Ohio 45404
Dayton suburb, Montgomery County

=====

Info Sources = Dayton & Suburban Polk Directories, select years from 1938 thru 1988 (last yr. available)

=====

1938 Dayton Polk Directory -- **Mullins Rubber Products** -- NOT MENTIONED
William (& Dorothy) Mullins = "laborer"

1942 Dayton Polk Directory -- **Mullins Rubber Products** -- NOT MENTIONED
925 East 3rd Street
William D. or H.(& Dorothy) Mullins = "used tires", "used"
[sometimes Polk provides different or wrong middle initial]

1947 Dayton Polk Directory -- **Mullins Rubber Products predecessor, Yellow Front, is mentioned**
William M. (& Dorothy) Mullins = "tire repairs"
"Yellow Front Tire Shop", 425 East 3rd Street *[425 is wrong street #; should be 925]*

1951& 1961 Dayton Polk Directory -- **Mullins Rubber Products or Yellow Front** -- NOT MENTIONED
"Sun Tire Co.", Harold Hibbert, 925 East 3rd Street; "Tire Dealers & Repairs"

1964 Dayton Polk Directory -- **Mullins Rubber Products** -- COMPANY NAME VERIFIED
2949 Valley Pike (Mad River Twp. 24) -- COMPANY ADDRESS VERIFIED
William Mullins; Tel. = 233-4211
"Manufacturers & Designers of Custom Molded Products", "Rubber Products"

1970, 1972 & 1975 Suburban Dayton Polk Directory –
William D. (& Dorothy) Mullins; William = "President-Treasurer, Mullins Rubber"
Mullins Rubber Products, Inc.; 2949 Valley Pike (Mad River Twp.)
"Rubber Goods -- Retail"

1988 Suburban Dayton Polk Directory –
William D. (& Dorothy) Mullins; William = "President-Treasurer"
Mullins Rubber Products, Inc.; 2949 Valley Pike (Mad River Twp.) ; Tel. = 233-4211
"Rubber Products -- Retail"

[Print](#)
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PARID: I39 00203 0048
PARCEL LOCATION: 2949 VALLEY PIKE

NBHD CODE: C3400000

Owner

Name

MULLINS LAND COMPANY

Mailing

Name

MULLINS LAND COMPANY

Mailing Address

P.O. BOX 24830

City, State, Zip

DAYTON, OH 45424

Legal

Legal Description

7-2-24 8-2-19

19-4-123

Land Use Description

I - MANUFACTURING & ASSEMBLY LIGHT

Acres

3.675

Deed

1993-00791E011

Tax District Name

RIVERSIDE CITY-MAD RIVER LSD

[Click Here to View Your 2011 Property Value Update Notice](#)

Values

***** TENTATIVE VALUES *****

Assessed Values

100%

35%

Land

\$92,200

\$32,270

Improvements

\$506,700

\$177,350

CAUV

\$0

\$0

Total

\$598,900

\$209,620

***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback

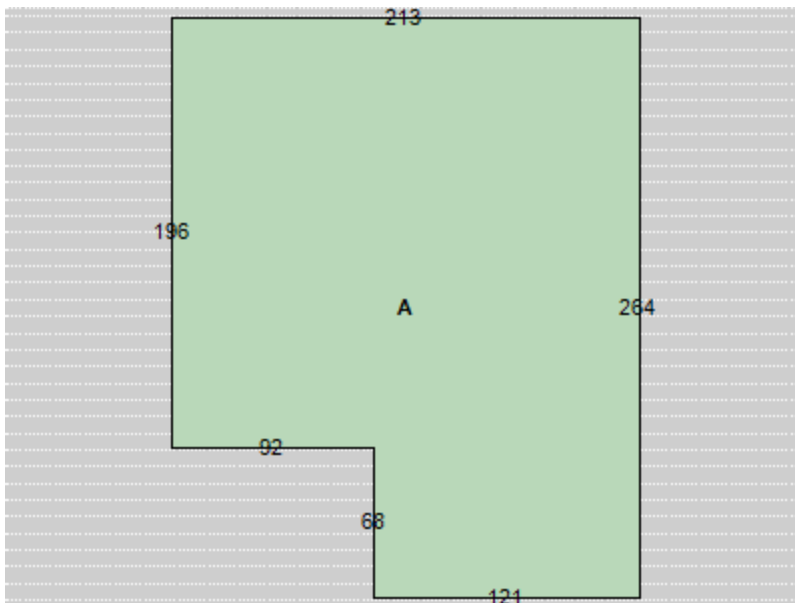
2.5% Rollback

Homestead

City of Dayton Credit

Tax Summary

Year	Prior Year	Prior Year Pymts	1st Half Due 2/18/2011	1st Half Payments	2nd Half Due 7/15/2011	2nd Half Payments	Total Currently Due
2011	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



A LIGHT MANUFACTURING, 49976 Sq. Ft.



2131 Harshman, riverside, ohio



Map

Traffic

My Notes

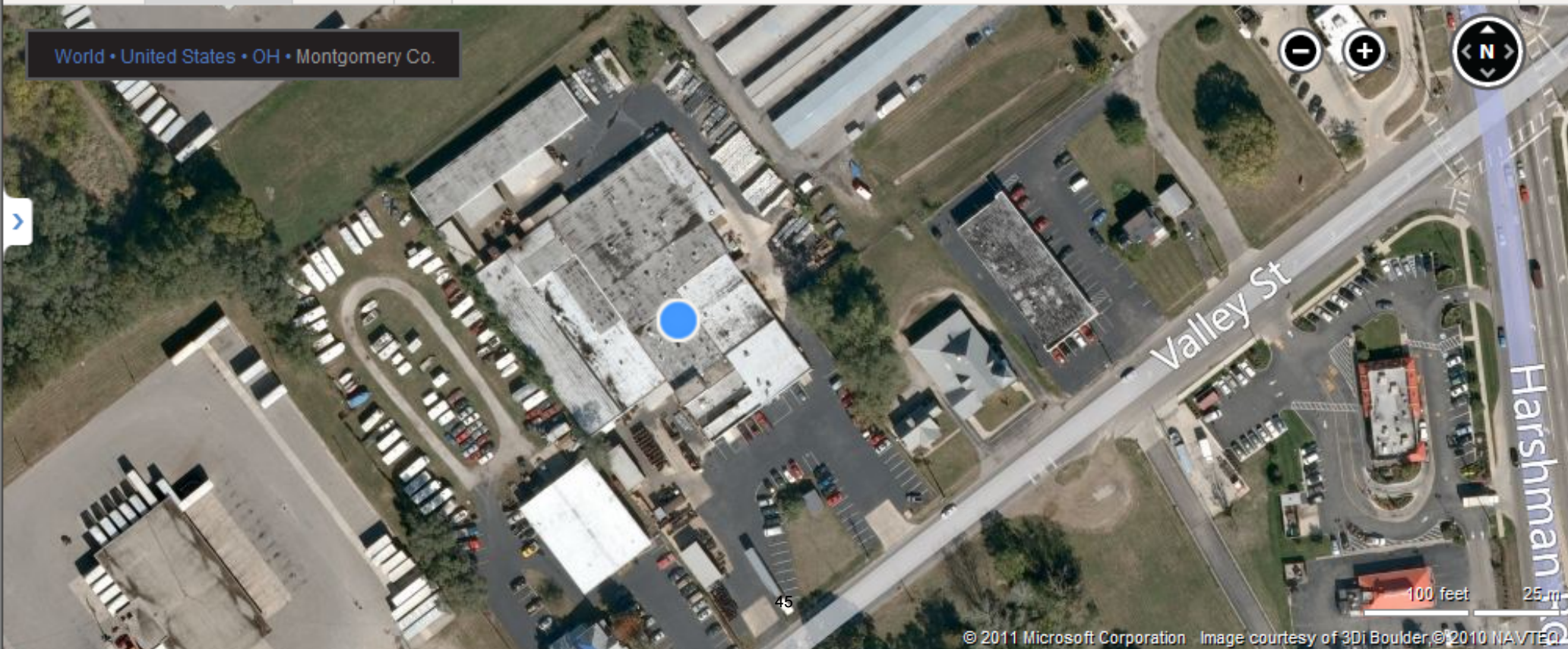


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World • United States • OH • Montgomery Co.





World • United States • OH • Montgomery Co.



100 feet

25 m



World • United States • OH • Montgomery Co.





World • United States • OH • Montgomery Co.





World • United States • OH • Montgomery Co.



[| CONTACT US](#) | [HELP](#)[County Auditors Page](#)[Home](#) [Property Search](#) [Property Value Update](#) [GIS / Real Estate Downloads](#)[Address](#) [Owner Name](#) [Parcel](#) [Advanced](#) [Land Use Codes](#)

Search by Property Address

Number Direction Street Name * Suffix Unit#

Filter By

Tax Year

 2011

Options

Sort by: Parcel ID Ascending Results/page: 15 SEARCH

* required

Click rows to view property details

Results 1 - 5 of 5

Parcel ID ▲

I39 00414 0001
I39 00414 0002
I39 00414 0003
I39 00414 0005
I39 00414 0007

Owner

RLR INVESTMENTS LLC
GARBER DEAN C
OLD DOMINION FREIGHT LIN...
SEPCO PROPERTIES LLC
J S DAVIS CO CORPORATION

Parcel Location

3154 TRANSPORTATION RD
3118 TRANSPORTATION RD
TRANSPORTATION RD
3141 TRANSPORTATION RD
3131 TRANSPORTATION RD

Results Page: **[1]**

Printable Version

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Appendix C

Ohio EPA Mobile Laboratory

Analytical Data



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Inter-Office Communication

To: Randy Watterworth Wendy Vorwerk
DERR-SWDO DERR-SIFU

From: Gavin Armstrong
DERR-SIFU

Subject: Mullins Rubber Products, Inc. Field Screening Data – Case Narrative

+++++

Reference Data:

Sample Location: Mullins Rubber Products, Inc. (Dayton)
Sample Media: Soil samples (from GeoProbe core grab samples) & ground water
Sample Type(s): Grab
Sample IDs: See attached Mobile Lab Log Sheets
Method Reference: *MiniRAE 2000 Photo-Ionizing Detector*
Photovac Voyager Gas Chromatograph (GC) - Modified method 8021B
Photovac Voyager Gas Chromatograph (GC) Photovac Tech notes No.3
Sample Receipt Date: 12/13 ~15/2011
Analysis Date: 12/13 ~15/2011

A total of 52 samples were received by the DERR mobile lab from 12/13-15/2011. All samples were logged and/or memorialized on the Mobile Lab Sample Log. 48 soil, 3 groundwater, and 1 ambient vapor sample(s) were logged. All soil samples were collected into labeled, plastic bags that were sealed before delivery into the mobile lab. Each bag was warmed in a controlled environment for approximately 10 to 15 minutes and screened with two individual MiniRAE 2000 PIDs (photo-ionizing detectors). Relative response concentrations from the PIDs were recorded on the mobile lab sample log sheets. Soil samples were then processed and analyzed with a Photovac Voyager Gas Chromatograph (GC). A total of 48 soil samples were analyzed. In addition to the soil samples, a total of 3 ground water grab samples were analyzed with the GC. Finally, one ambient vapor sample was collected and analyzed with the GC. All data, including QA/QC samples/analyses were appropriately memorialized and entered into a spreadsheet. No significant QA/QC problems were encountered. Calibration standards for PCE and TCE – at concentrations of 11 ppb – were analyzed prior to, and during sample analyses. Additionally, instrument blanks, syringe blanks, bottle blanks, and duplicate sample analyses were included as part of the overall QA checks for the system.

All sample containers were received in acceptable condition upon being logged into the mobile lab. Unless otherwise noted in the bench-top analytical reports, all samples were analyzed within acceptable holding time(s).

Samples were analyzed specifically for Tetrachlorethene (PCE) and Trichloroethylene (TCE). Samples were prepared and handled according to Photovac Tech Notes Number 3, "Procedure for Preparing Soil and Water Samples for Analysis by Voyager Portable GC" using the Photovac Voyager portable GC. Samples were analyzed according to a modified method 8021B. Samples were analyzed specifically on the "B Column" with a total analysis time of 600 seconds.

NOTE: All samples were analyzed in a timely manner upon receipt into the mobile lab. Correction factors for the data, to determine the final specific concentrations were made according to Photovac Tech Notes. All samples were stored, prepared and analyzed within acceptable holding times for proper analysis and all according to specific methodology. Also, a potential transformation of the Chlorinated Aliphatic Hydrocarbons (in this case, 1,2 DCE compound and 2-CE Vinyl ether compound) were identified as being present in some samples. These results were hereby qualified as they were not part of the calibration process for this project. Finally, the GC identified the compound of 2-Hexanone as well as other peaks for compound not readily identified by the Photovac instrument – these unknown compounds are not included in the data table.

Mullins Rubber Products, Inc. GC Screening Data Report

12/13, 14, 15 /2011

<u>Sample #</u>	<u>Date</u>	<u>Analyte(s)</u>	<u>Analysis Time</u>	<u>ECD</u>	<u>PID</u>	<u>Conc. in ppb</u>	<u>Qualifier</u>	<u>Comments</u>
BLANK	12/13/2011	BLANK	600	N/A		2-Hexanone 101 ppb		
Cal Std.		Cal Std.				TCE/PCE		TCE & PCE Cal Std.
Cal Std.		Cal Std.				TCE/PCE		TCE & PCE Cal Std.
PZ 1 0-4'		N/D				N/D		
PZ 1 4-8'		N/D				N/D		Unk Peaks (Styrene @ 537 R.T.)
PZ 1 8-12'		N/D				N/D		" " "
PZ 1 12-16'		N/D				N/D		" " "
PZ 1 16-20'		PCE			x	0.6 ppb	J**	
PZ 1 20-24'		N/D				N/D		
Syringe Blk		2-Hexanone			x		J**	not calibrated for this compound
Vapor 1		N/D				N/D		
Vapor 2		N/D				N/D		
BLANK		N/D				N/D		
Vapor 3		N/D				N/D		
PZ 2 0-4'								
PZ 2 4-8'		TCE			x	0.1 ppb	J**	
		Benzene			x		J**	not calibrated for this compound
		PCE			x	0.1 ppb	J**	
PZ 2 Decant		TCE			x	1.9 ppb	J**	24 - 27.5'
		PCE			x	9.3 ppb	J**	
		1,2 DCE			x	6.4 ppb	J**	not calibrated for this compound
		2-CE vinyl Ether			x	135.7 ppb	J**	not calibrated for this compound
PZ 2 12-16'		TCE			x	0.08 ppb	J**	
PZ 2 16-20'		TCE			x	0.27 ppb	J**	
PZ 2 20-24'		TCE			x	0.58 ppb	J**	
		PCE			x	0.9 ppb	J**	
PZ 3 0-4'		N/D						
PZ 3 8-12'		N/D						
PZ 3 12-16'		N/D						
PZ 3 16-20'		N/D						
PZ 3 20-24'		N/D						
PZ 3 24-26.5'		N/D						

** J qualified data: Below calibration range, or not calibrated on GC.

Mullins Rubber Products, Inc.

GC Screening Data Report

Sample #	Date	Analyte(s)	Analysis Time	ECD	PID	Conc. in ppb	Qualifier	Comments
BLANK	12/14/2011	N/D						
DITCH		N/D						
PZ 4 0-4'		N/D						
Ditch DUP		N/D						
PZ 4 4-7'		N/D						
PZ 4 7-12'		N/D						
PZ 4 water		TCE			x	3.79 ppb	J**	32-35'
		PCE			x	46 ppb		
		1,2 DCE			x	274.5 ppb	J**	not calibrated for this compound
		2-CE vinyl Ether			x		J**	not calibrated for this compound
PZ 4 12-16'								
PZ 4 16-20'		PCE			x	1.87 ppb	J**	
PZ 4 water		PCE			x	1.63 ppb	J**	second analysis
PZ 4 20-24'		N/D						
PZ 4 24-28'		N/D						
Syringe Bk		N/D						
SB 1 4-8'		N/D				N/D		
SB 2 0-4'		N/D				N/D		
SB 2 4-8'		N/D				N/D		
Dry Well		N/D				N/D		
SB 3 0-4'		N/D				N/D		
SB 3 4-8'		TCE			x	0.23 ppb	J**	
PZ 5 0-4'		N/D				N/D		
PZ 5 4-8'		PCE			x	1.29 ppb	J**	
PZ 5 8-12'		PCE			x	0.5 ppb	J**	
PZ 5 12-16'		PCE			x	2.5 ppb	J**	
PZ 5 16-20'		TCE			x	22.7 ppb		
PZ 5 20-24'		2-CE vinyl Ether					J**	not calibrated for this compound
		1,2 DCE					J**	not calibrated for this compound
PZ 5 24-26'		N/D				N/D		
BLANK		N/D				N/D		
BLANK	12/15/2011	N/D				N/D		
Syringe Bk		N/D				N/D		

** J qualified data: Below calibration range, or not calibrated on GC.

Mullins Rubber Products, Inc.

GC Screening Data Report

<u>Sample #</u>	<u>Date</u>	<u>Analyte(s)</u>	<u>Analysis Time</u>	<u>ECD</u>	<u>PID</u>	<u>Conc. in ppb</u>	<u>Qualifier</u>	<u>Comments</u>
PZ 5A 4-8'		N/D				N/D		
PZ 5A 8-12'		N/D				N/D		
PZ 5A 20-24'		PCE			x	1.6 ppb	J**	
PZ 5A 24-27'		N/D				N/D		
PZ 5A 12-16'		N/D				N/D		
PZ 5A 16-20'		TCE			x	3.05 ppb	J**	
		PCE			x	1.64 ppb	J**	
		2-Hexanone			x	12.9 ppb	J**	not calibrated for this compound
SB 04		N/D				N/D		
BLANK		N/D				N/D		
BLANK		N/D				N/D		
PZ 1 BKG		N/D				N/D		Background water from tubing
PZ 1 BKG		N/D				N/D		Background water from tubing

** J qualified data: Below calibration range, or not calibrated on GC.

MOBILE LAB SAMPLE LOG

Project Name: Mullins Rubber

12/13/11

Page: 1 of

Contact Phone No. :

Project Contact:

Sample ID	Date	Time	Matrix			Analysis				Sampler's Initials	Special Instructions		
			Soil	Water	Air/Gas	GC	XRF	Immuno	Other		p16		
1 PZ1 0-4'	12/13/11	10:10	✓						5.2g			15	16
2 PZ1 4-8'									5.5g			0	0
3 PZ1 8-12'									5.4g		Sandy/gravel	0.3	0.6
4 PZ1 12-16'									4.8g		"	0.3	0.1
5 PZ1 16-20'									5.4g		"	0.6	59.9
6 PZ1 20-24'									6.5g		"	0.5	20
7 PZ2 0-4'									4.6g		Some clay mixed	0.1	0.6
8 PZ2 4-8'									5.2g			0.2	0.0
9 PZ2 8-12'									5.9g		Sand/gravel	0.0	0.2
10 PZ2 12-16'									5.8g		"	0.2	0.5
11 PZ2 16-20'									5.4g		"	0.2	1.2
12 PZ2 20-24'									6.1g		"	0.6	18.4
13 PZ2 24-27.5'				X							"	0.4	50
14 PZ3 0-4'			✓						5.0g		DECANT	—	—
15 PZ3 8-12'									5.2g			0.2	0.2
16 PZ3 12-16'									5.0g		Sandy/gravel	0.2	2.8
17 PZ3 16-20'									5.2g			0.0	7.8
18 PZ3 20-24'									6.5g			0.2	3.8
19 PZ3 24-26.5'									6.3g			0.1	0.0
20 DITCH	12/14/11	0830	X						5.8g			0.0	0.0

MOBILE LAB SAMPLE LOG

Project Name: Mullins Rubber

Page: 2 of

Contact Phone No. :

Project Contact:

Sample ID	Date	Time	Matrix			Analysis				Sampler's Initials	Special Instructions		
			Soil	Water	Air/Gas	GC	XRF	Immuno	Other			15	16
1 PZ4 0-4'	12/14/11		x						5.5g			0.0	—
2 PZ4 0-4' 4-7'			x						5.8g			0.1	2.0
3 PZ4 7-12'			x						7.0g			0.0	3.0
4 PZ4 12-16'			x						6.6g			0.0	—
5 PZ4 16-20'			x						5.7g			0.0	—
6 PZ4 32-35'				x									
7 PZ4 20-24'			x						5.7g			0.4	—
8 PZ4 24-28'			x						5.7g			1.3	—
9 SB1 4-8'			x						4.8g		Sand	0	4.5
10 SB2 0-4'			x						6.1g		"	0.0	—
11 SB2 4-8'			x						4.8g		Sand	0.0	—
12 DRYWELL			x						5.4g			0.0	—
13 SB3 0-4'			x						6.1g			0.6	—
14 SB3 4-8'			x						6.2g			0.3	—
15 PZ5 0-4'			x						5.5g			0.1	—
16 PZ5 4-8'			x						5.5g			0.3	—
17 PZ5 8-12'			x						5.3g		Sand/gravel	0.2	—
18 PZ5 12-16'			x						6.0g		Sandy/gravel	0.5	—
19 PZ5 16-20'			x						6.3g		Slightly moist	0.0	—
20 PZ5 20-24'			x						6.0g			0.1	—

MOBILE LAB SAMPLE LOG

Project Name:

Page: 3 of

Contact Phone No. :

Project Contact:

	Sample ID	Date	Time	Matrix			Analysis				Sampler's Initials	Special Instructions	PID	
				Soil	Water	Air/Gas	GC	XRF	Immuno	Other			15	16
1	P25 24-26'	12/14/11		X						5.8g			0.0	—
2	P25A 4-8'	12/15/11		X						5.4g				
3	P25A 8-12'									5.3g				
4	P25A 20-24'									6.0g		TOP 6"		
5	P25A 24-27'									5.8g				
6	P25A 12-16'									5.3g		from Core Sand / gravel		
7	P25A 16-20'									5.1g				
8	SB4 0-4'									5.5g				
9	BACKGROUND P21				X									
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

MOBILE LAB SAMPLE LOG SHEET

Project Name: Mullins Ruber

Contact Phone No. : (937) 285-6062

(614) 836-8759

Project Contact: Randy Watterworth

Wendy Vorwerk

Sample ID		Date	Time	Matrix			Analysis			Initial GC screening result	Special Instructions
				Soil	Water		GC	Lab PID Bag (mg/kg)	Other*		
1	PZ 1 0-4'	12/13/2011	11:00	X			X	0 / 0	5.2g		
2	PZ 1 4-8'	12/13/2011		X			X	0.3 / 0.6	5.5g		sandy/gravel sample
3	PZ 1 8-12'	12/13/2011		X			X	0.3 / 0.1	5.4g		sandy/gravel sample
4	PZ 1 12-16'	12/13/2011		X			X	0.6 / 59.9	4.8g		sandy/gravel sample
5	PZ 1 16-20'	12/13/2011		X			X	0.5 / 20	5.4g		sandy/gravel sample
6	PZ 1 20-24'	12/13/2011		X			X	0.1 0.6	6.5g		some clay mixed
7	PZ 2 0-4'	12/13/2011		X			X	0.2 / 0.0	4.6g		
8	PZ 2 4-8'	12/13/2011		X			X	0.0 / 0.2	5.2g		sandy/gravel
9	PZ 2 8-12'	12/13/2011		X			X	0.2 / 0.5	5.9g		sandy/gravel
10	PZ 2 12-16'	12/13/2011		X			X	0.2 / 1.2	5.8g		sandy/gravel
11	PZ 2 16-20'	12/13/2011		X			X	0.6 / 18.4	5.4g		sandy/gravel
12	PZ 2 20-24'	12/13/2011		X			X	0.4 / 50	6.1g		sandy/gravel
13	PZ 2 24-27.5'	12/13/2011			X		X	N/A			Decant off probe core
14	PZ 3 0-4'	12/13/2011		X			X	0.2 / 0.2	5.0g		
15	PZ 3 8-12'	12/13/2011		X			X	0.2 / 2.8	5.2g		sandy/grave;
16	PZ 3 12-16'	12/13/2011		X			X	0.0 / 7.8	5.0g		
17	PZ 3 16-20'	12/13/2011		X			X	0.2 / 3.8	5.2g		
18	PZ 3 20-24'	12/13/2011		X			X	0.1 / 0.0	6.5g		
19	PZ 3 24-26.5'	12/13/2011		X			X	0.0 / 0.0	6.3g		
20	DITCH	12/14/2011	8:30	X			X	0.0 / over range	5.8g		

* Other- Soil sample volume for mobile lab screening aliquot in grams.

MOBILE LAB SAMPLE LOG SHEET

Project Name: Mullins Ruber

Contact Phone No. : (937) 285-6062

Project Contact: Randy Watterworth

(614) 836-8759

Wendy Vorwerk

Sample ID		Date	Time	Matrix			Analysis			Initial GC screening result	Special Instructions
				Soil	Water		GC	Lab PID Bag (mg/kg)	Other*		
21	PZ 4 0-4'	12/14/2011		X			X	0.0 / --	5.5g		
22	PZ 4 4-7'	12/14/2011		X			X	0.1 / 2.0	5.8g		
23	PZ 4 7-12'	12/14/2011		X			X	0.0 / 3.0	7.0g		
24	PZ 4 12-16'	12/14/2011		X			X	0.0 / --	6.6g		
25	PZ 4 16-20'	12/14/2011		X			X	0.0 / --	5.7g		
26	PZ 4 32-35'	12/14/2011			X		X				
27	PZ 4 20-24'	12/14/2011		X			X	0.4 / --	5.7g		
28	PZ 4 24-28'	12/14/2011		X			X	1.3 / --	5.7g		
29	SB 1 4-8'	12/14/2011		X			X	0.0 / 4.5	4.8g		sand
30	SB 2 0-4'	12/14/2011		X			X	0.0 / --	6.1g		sand
31	SB 2 4-8'	12/14/2011		X			X	0.0 / --	4.8g		sand
32	DRYWELL	12/14/2011		X			X	0.0 / --	5.4g		
33	SB 3 0-4'	12/14/2011		X			X	0.6 / --	6.1g		
34	SB 3 4-8'	12/14/2011		X			X	0.3 / --	6.2g		
35	PZ 5 0-4'	12/14/2011		X			X	0.1 / --	5.5g		
36	PZ 5 4-8'	12/14/2011		X			X	0.3 / --	5.5g		
37	PZ 5 8-12'	12/14/2011		X			X	0.2 / --	5.3g		sandy/gravel
38	PZ 5 12-16'	12/14/2011		X			X	0.5 / --	6.0g		sandy/gravel
39	PZ 5 16-20'	12/14/2011		X			X	0.0 / --	6.3g		slightly moist sample
40	PZ 5 20-24'	12/14/2011		X			X	0.1 / --	6.0g		

* Other- Soil sample volume for mobile lab screening aliquot in grams.

MOBILE LAB SAMPLE LOG SHEET

Project Name: Mullins Ruber

Contact Phone No. : (937) 285-6062

(614) 836-8759

Project Contact: Randy Watterworth

Wendy Vorwerk

Sample ID		Date	Time	Matrix			Analysis			Initial GC screening result	Special Instructions
				Soil	Water		GC	Lab PID Bag (mg/kg)	Other*		
41	PZ 5 24-26'	12/14/2011		X			X	0.0 / --	5.8g		
42	PZ 5A 4-8'	12/15/2011		X			X	0.0 / --	5.4g		
43	PZ 5A 8-12'	12/15/2011		X			X	0.0 / --	5.3g		
44	PZ 5A 20-24'	12/15/2011		X			X	0.0 / --	6.0g		Top 6 inches
45	PZ 5A 24-27'	12/15/2011		X			X	0.0 / --	5.8g		
46	PZ 5A 12-16"	12/15/2011		X			X		5.3g		from enCore jar sand/gravel
47	PZ 5A 16-20'	12/15/2011		X			X	0.0 / --	5.1g		
48	SB 4 0-4'	12/15/2011		X			X	0.0 / --	5.5g		
49	BACKGROUND PZ 1	12/15/2011			X		X				

* Other- Soil sample volume for mobile lab screening aliquot in grams.

12/13/11

Mullins Rubber

P.1.

Blank 2-Hexanone 101 ppb

PZ1 0-4': N/D

PZ1 4-8': UNK PEAKS Styrene 537 R.T. (95 ppb)

PZ1 8-12': UNK PEAKS Styrene 537 R.T. (89 ppb)

PZ1 12-16': UNK PEAKS Styrene 544 R.T. (51 ppb)

PZ1 16-20': PCE 15 ppb (J) UNK after re-integration 0.6 ppb

PZ1 20-24': N/D

Syringe Blank: 2-Hexanone

VAPOR #1

Vapor #2 - Bag

Blank:

VAPOR #3 - Bag

PZ2 0-4': N/D

1345 PZ2 4-8': TCE @ 5 ppb (J) Benzene 0.1 ppb
 PCE @ 5 ppb (J) 0.1 ppb

1359 PZ2 8-12': N/D

PZ2 DECANT (24-27.5'): TCE 50 ppb (47) 1.9 ppb
 PCE 239 ppb (249) 9.3 ppb
 1,2 DCE 164 ppb (404) 6.4 ppb
 2-CE vinyl ether 3.47 ppm (4.3 ppm) 135.7 ppb

PZ2 12-16': TCE @ 2 ppb (J) 0.08 ppb

PZ2 16-20': TCE @ 7 ppb (J) 0.27 ppb

PZ2 20-24': PCE 23 ppb After re-integration: TCE @ 15 ppb 0.58 ppb
 PCE @ 23 ppb 0.90 ppb

12/13/11

PZ3 0-4': N/D
 PZ3 8-12': N/D
 PZ3 12-16': N/D
 PZ3 16-20': N/D
 PZ3 20-24': N/D
 PZ3 24-26.5': N/D

12/14/11

BLANK

DS46 DITCH: N/D

PZ4 0-4': N/D

DITCH #2 SAMPLE - SAME BATCH: N/D

PZ4 4-7': N/D

PZ4 7-12': N/D

PZ4 32-35' WATER: TCE 97 ppb 3.79 ppb
 PCE 1.19 ppm 46 ppb
 1,2 DCE 7.02 ppm 274.5 ppb
 2-chloroethyl ether

~~PZ4 12-16':~~

PZ4 12-16': N/D

PZ4 16-20': PCE @ 48 ppb - N/D after re-integration (T) 1.87 ppb

PZ4 32-35' WATER 2nd Analysis: PCE 41 ppb 1.63 ppb

PZ4 20-24': N/D

PZ4 24-28': PCE

Syringe Blank: N/D

SB1 4-8': N/D

12/14/11

P-3

SB2 0-4': N/D

SB2 4-8': N/D

~~SB2~~ DRYWELL: N/D

SB3 0-4': N/D

SB3 4-8': TCE 6 ppb (J) 0.23 ppb

~~SB3 8-12'~~

PZ5 0-4': N/D

PZ5 4-8': PCE c 33 ppb (N/D after re-integration) (J) 1.29 ppb

PZ5 8-12': PCE c 13 ppb (J) 0.50 ppb

PZ5 12-16': PCE c 63 ppb (N/D after re-integration) (J) 2.5 ppb

* PZ5 16-20': TCE c 582 ppb 22.7 ppb

PZ5 20-24': N/D (after re-integration)

2-cyclohex

1,2 DCA

PZ5 24-26': N/D

Blank: N/D

12/15/11

Blank: N/D

SYNTHETIC BLANK: STYRENE

PZSA 4-8': N/D

PZSA 8-12': N/D

PZSA 20-24': PCE c 41 ppb N/D after re-integration 1.6 ppb

PZSA 24-27': N/D

12/15/11

Mullins Rubber

P.4

PZ5A 12-16' : N/D

PZ5A	16-20' :	TCE	78 ppb	3.05 ppb
		PCE	42 ppb	1.64 ppb
		2-chloroaniline	332 ppb	12.9 ppb

SB ϕ 4 : N/D

Blank : N/D

Blank : N/D

PZ1 BACKGROUND WATER : N/D

PZ1 BACKGROUND WATER #2 : N/D

Appendix D

Analytical Results

Contract Laboratory Program

ESAT5.316.00162

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

ack
2-6-12

DATE:

SUBJECT: Review of Data
Received for Review on: 10 January 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: OEPA
Wendy.vorwerk@epa.state.oh.us

Level 3 Data Validation

We have reviewed the data for the following case:

SITE Name: Mullins Rubber Products (OH)

Case Number: 42079

SDG Number: E5L86

Number and Type of Samples: 6 soil (volatiles)

Sample Numbers: E5L86, E5L97, E5LA5 through E5LA8

Laboratory: Mitkem Laboratories

Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J

Case Number: 42079

SDG Number: E5L86

Site Name: Mullins Rubber Products (OH)

Laboratory: Mitkem Laboratories

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Six (6) soil samples labeled E5L86, E5L97 and E5LA5 through E5LA8, were shipped to Mitkem Laboratories located in Warwick, RI. All samples were collected between 12/13/11 and 12/15/11 and received between 12/14/11 and 12/16/11 intact. Sample E5L86 arrived at the proper shipping temperature range of 2 - 6°C. Samples E5L97, E5LA5, E5LA6, E5LA7 and E5LA8 arrived in a coolers with temperatures of 8.0°C. Sample results are not qualified for this discrepancy.

All samples were analyzed for the volatile list of compounds. All samples were analyzed according to CLP SOW SOM01.2 (6/2007) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.6).

Sample E5L86 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No samples were identified as field blanks or field duplicates.

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 3 of 5
SDG Number: E5L86
Laboratory: Mitkem Laboratories

1. HOLDING TIME

No Problems Found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No Problems Found.

3. CALIBRATION

The following volatile samples are associated with an initial calibration and an opening continuing calibration with relative response factors (RRFs) outside criteria. The compounds were not detected in the samples. Non-detected compounds are qualified "R".

E5L86, E5L86MS, E5L86MSD, E5L97, E5LA5, E5LA6, E5LA7, E5LA8, VBLK5P,
VBLK5Q, VHBLK5Q
1,4-Dioxane

The following volatile samples are associated with an initial calibration and an opening continuing calibration in which a DMC did not meet relative response factor (RRF) criteria. Detected and non-detected compounds are not qualified.

E5L86, E5L86MS, E5L86MSD, E5L97, E5LA5, E5LA6, E5LA7, E5LA8, VBLK5P,
VBLK5Q, VHBLK5Q
1,4-Dioxane-d8

4. BLANKS

No Problems Found.

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile samples have one or more DMC/SMC recovery values less than the primary lower limit but greater than or equal to the expanded lower limit (20%) of the criteria window. The compounds were not detected in the samples. Non-detected compounds are qualified "UJ".

E5LA5
Vinyl chloride

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E5L86 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 4 of 5
SDG Number: E5L86
Laboratory: Mitkem Laboratories

No Problems Found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to volatile analyses.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

No Problems Found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all volatile compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL).
Detected compounds are qualified "J".

E5LA5
2-Butanone

A library search indicates a match at or above 85% for a TIC compound in the volatile sample.
Detected compounds are qualified "NJ".

CAS No. 556-67-2 Cyclotetrasiloxane, octameth
E5L97

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

Sample tags missing for all samples except E5L86.

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 5 of 5
SDG Number: E5L86
Laboratory: Mitkem Laboratories

CADRE Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Sample Summary Report

Case No:	42079	Contract:	EPW11033	SDG No:	ESL86	Lab Code:	MITKEM
Sample Number:	ESL86	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-1	pH:	7.0	Sample Date:	12132011	Sample Time:	12:49:00
% Moisture :	15.12195			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.5	ug/Kg	1.0	U	U	Yes	
Chloromethane	4.5	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	4.5	ug/Kg	1.0	U	U	Yes	
Bromomethane	4.5	ug/Kg	1.0	U	U	Yes	
Chloroethane	4.5	ug/Kg	1.0	U	U	Yes	
Trichlorofluorom ethane	4.5	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	4.5	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.5	ug/Kg	1.0	U	U	Yes	
Acetone	9.1	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	4.5	ug/Kg	1.0	U	U	Yes	
Methyl acetate	4.5	ug/Kg	1.0	U	U	Yes	
Methylene chloride	4.5	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	4.5	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	4.5	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	4.5	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	4.5	ug/Kg	1.0	U	U	Yes	
2-Butanone	9.1	ug/Kg	1.0	U	U	Yes	
Bromochloromet hane	4.5	ug/Kg	1.0	U	U	Yes	
Chloroform	4.5	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	4.5	ug/Kg	1.0	U	U	Yes	
Cyclohexane	4.5	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	4.5	ug/Kg	1.0	U	U	Yes	
Benzene	4.5	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	4.5	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	91	ug/Kg	1.0	U	R	Yes	
Trichloroethene	4.5	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Methylcyclohexane	4.5	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	4.5	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	4.5	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	4.5	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	9.1	ug/Kg	1.0	U	U	Yes	
Toluene	4.5	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	4.5	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	4.5	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	4.5	ug/Kg	1.0	U	U	Yes	
2-Hexanone	9.1	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	4.5	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	4.5	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	4.5	ug/Kg	1.0	U	U	Yes	
o-Xylene	4.5	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	4.5	ug/Kg	1.0	U	U	Yes	
Styrene	4.5	ug/Kg	1.0	U	U	Yes	
Bromoform	4.5	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	4.5	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	4.5	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	4.5	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	4.5	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5L86MS	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-I	pH:	7.0	Sample Date:	12132011	Sample Time:	12:49:00
% Moisture :	15.12195			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	48	ug/Kg	1.0			Yes	
Dichlorodifluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Benzene	56	ug/Kg	1.0			Yes	
Trichloroethene	60	ug/Kg	1.0			Yes	
Vinyl chloride	5.0	ug/Kg	1.0	U	U	Yes	
Toluene	55	ug/Kg	1.0			Yes	
Bromomethane	5.0	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	55	ug/Kg	1.0			Yes	
Chloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/Kg	1.0	U	U	Yes	
Acetone	10	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.0	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.0	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroform	5.0	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Methylcyclohexane	5.0	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	5.0	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.0	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
Styrene	5.0	ug/Kg	1.0	U	U	Yes	
Bromoform	5.0	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.0	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5L86MSD	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-1	pH:	7.0	Sample Date:	12132011	Sample Time:	12:49:00
% Moisture :	15.12195			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	48	ug/Kg	1.0			Yes	
Dichlorodifluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Benzene	54	ug/Kg	1.0			Yes	
Trichloroethene	58	ug/Kg	1.0			Yes	
Vinyl chloride	5.0	ug/Kg	1.0	U	U	Yes	
Bromomethane	5.0	ug/Kg	1.0	U	U	Yes	
Toluene	53	ug/Kg	1.0			Yes	
Chlorobenzene	54	ug/Kg	1.0			Yes	
Chloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/Kg	1.0	U	U	Yes	
Acetone	10	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.0	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.0	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroform	5.0	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Methylcyclohexane	5.0	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	5.0	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.0	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
Styrene	5.0	ug/Kg	1.0	U	U	Yes	
Bromoform	5.0	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.0	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5L97	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-2	pH:	7.0	Sample Date:	12142011	Sample Time:	13:50:00
% Moisture :	8.17052			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	4.7	ug/Kg	1.0	U	U	Yes	
Chloromethane	4.7	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	4.7	ug/Kg	1.0	U	U	Yes	
Bromomethane	4.7	ug/Kg	1.0	U	U	Yes	
Chloroethane	4.7	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	4.7	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	4.7	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.7	ug/Kg	1.0	U	U	Yes	
Acetone	9.4	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	4.7	ug/Kg	1.0	U	U	Yes	
Methyl acetate	4.7	ug/Kg	1.0	U	U	Yes	
Methylene chloride	4.7	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	4.7	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	4.7	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	4.7	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	4.7	ug/Kg	1.0	U	U	Yes	
2-Butanone	9.4	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	4.7	ug/Kg	1.0	U	U	Yes	
Chloroform	4.7	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	4.7	ug/Kg	1.0	U	U	Yes	
Cyclohexane	4.7	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	4.7	ug/Kg	1.0	U	U	Yes	
Benzene	4.7	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	4.7	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	94	ug/Kg	1.0	U	R	Yes	
Trichloroethene	4.7	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	4.7	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	4.7	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	4.7	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.7	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	4.7	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	9.4	ug/Kg	1.0	U	U	Yes	
Toluene	4.7	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	4.7	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	4.7	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	4.7	ug/Kg	1.0	U	U	Yes	
2-Hexanone	9.4	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	4.7	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	4.7	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	4.7	ug/Kg	1.0	U	U	Yes	
o-Xylene	4.7	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	4.7	ug/Kg	1.0	U	U	Yes	
Styrene	4.7	ug/Kg	1.0	U	U	Yes	
Bromoform	4.7	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	4.7	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	4.7	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	4.7	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	4.7	ug/Kg	1.0	U	U	Yes	
Cyclotetrasiloxane, octamethyl-			1.0	NJ		Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5LA5	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-3	pH:	7.0	Sample Date:	12152011	Sample Time:	09:50:00
% Moisture :	8.14717			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.2	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.2	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	5.2	ug/Kg	1.0	U	UJ	Yes	
Bromomethane	5.2	ug/Kg	1.0	U	U	Yes	
Chloroethane	5.2	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.2	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	5.2	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	ug/Kg	1.0	U	U	Yes	
Acetone	12	ug/Kg	1.0			Yes	
Carbon disulfide	5.2	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.2	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.2	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.2	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.2	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.2	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.2	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	J	J	Yes	
Bromochloromethane	5.2	ug/Kg	1.0	U	U	Yes	
Chloroform	5.2	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.2	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.2	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.2	ug/Kg	1.0	U	U	Yes	
Benzene	5.2	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.2	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Trichloroethene	5.2	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	5.2	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	5.2	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.2	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.2	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.2	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
Toluene	5.2	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.2	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.2	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	100	ug/Kg	1.0			Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.2	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.2	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.2	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.2	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.2	ug/Kg	1.0	U	U	Yes	
Styrene	5.2	ug/Kg	1.0	U	U	Yes	
Bromoform	5.2	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.2	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.2	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.2	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.2	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5LA6	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-4	pH:	7.0	Sample Date:	12152011	Sample Time:	11:20:00
% Moisture :	19.22428			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloromethane	6.3	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	6.3	ug/Kg	1.0	U	U	Yes	
Bromomethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	6.3	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	ug/Kg	1.0	U	U	Yes	
Acetone	13	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	6.3	ug/Kg	1.0	U	U	Yes	
Methyl acetate	6.3	ug/Kg	1.0	U	U	Yes	
Methylene chloride	6.3	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	6.3	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
2-Butanone	13	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloroform	6.3	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Cyclohexane	6.3	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	6.3	ug/Kg	1.0	U	U	Yes	
Benzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	130	ug/Kg	1.0	U	R	Yes	
Trichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	6.3	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	6.3	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	6.3	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	6.3	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	13	ug/Kg	1.0	U	U	Yes	
Toluene	6.3	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	6.3	ug/Kg	1.0	U	U	Yes	
2-Hexanone	13	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	6.3	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	6.3	ug/Kg	1.0	U	U	Yes	
o-Xylene	6.3	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	6.3	ug/Kg	1.0	U	U	Yes	
Styrene	6.3	ug/Kg	1.0	U	U	Yes	
Bromoform	6.3	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	6.3	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	6.3	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5LA7	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-5	pH:	7.0	Sample Date:	12152011	Sample Time:	13:00:00
% Moisture :	14.98638			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloromethane	6.3	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	6.3	ug/Kg	1.0	U	U	Yes	
Bromomethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	6.3	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	ug/Kg	1.0	U	U	Yes	
Acetone	13	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	6.3	ug/Kg	1.0	U	U	Yes	
Methyl acetate	6.3	ug/Kg	1.0	U	U	Yes	
Methylene chloride	6.3	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	6.3	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
2-Butanone	13	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	6.3	ug/Kg	1.0	U	U	Yes	
Chloroform	6.3	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Cyclohexane	6.3	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	6.3	ug/Kg	1.0	U	U	Yes	
Benzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	130	ug/Kg	1.0	U	R	Yes	
Trichloroethene	6.3	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	6.3	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	6.3	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	6.3	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	6.3	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	13	ug/Kg	1.0	U	U	Yes	
Toluene	6.3	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	6.3	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	6.3	ug/Kg	1.0	U	U	Yes	
2-Hexanone	13	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	6.3	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	6.3	ug/Kg	1.0	U	U	Yes	
o-Xylene	6.3	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	6.3	ug/Kg	1.0	U	U	Yes	
Styrene	6.3	ug/Kg	1.0	U	U	Yes	
Bromoform	6.3	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	6.3	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	6.3	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	6.3	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	E5LA8	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SO-6	pH:	7.0	Sample Date:	12152011	Sample Time:	13:45:00
% Moisture :	18.33616			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.6	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.6	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	5.6	ug/Kg	1.0	U	U	Yes	
Bromomethane	5.6	ug/Kg	1.0	U	U	Yes	
Chloroethane	5.6	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.6	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	5.6	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	ug/Kg	1.0	U	U	Yes	
Acetone	11	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.6	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.6	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.6	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.6	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.6	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.6	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.6	ug/Kg	1.0	U	U	Yes	
2-Butanone	11	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.6	ug/Kg	1.0	U	U	Yes	
Chloroform	5.6	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.6	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.6	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.6	ug/Kg	1.0	U	U	Yes	
Benzene	5.6	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.6	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	110	ug/Kg	1.0	U	R	Yes	
Trichloroethene	5.6	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	5.6	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	5.6	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.6	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.6	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.6	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	11	ug/Kg	1.0	U	U	Yes	
Toluene	5.6	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.6	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.6	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.6	ug/Kg	1.0	U	U	Yes	
2-Hexanone	11	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.6	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.6	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.6	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.6	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.6	ug/Kg	1.0	U	U	Yes	
Styrene	5.6	ug/Kg	1.0	U	U	Yes	
Bromoform	5.6	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.6	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.6	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.6	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.6	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	VBLK5P	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :	0.00000			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	5.0	ug/Kg	1.0	U	U	Yes	
Bromomethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/Kg	1.0	U	U	Yes	
Acetone	10	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.0	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.0	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroform	5.0	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.0	ug/Kg	1.0	U	U	Yes	
Benzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Trichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	5.0	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.0	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
Toluene	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.0	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
Styrene	5.0	ug/Kg	1.0	U	U	Yes	
Bromoform	5.0	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.0	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5L86	Lab Code: MITKEM
Sample Number: VBLK5Q	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 7.0	Sample Date:	Sample Time:
% Moisture : 0.00000		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	5.0	ug/Kg	1.0	U	U	Yes	
Bromomethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/Kg	1.0	U	U	Yes	
Acetone	10	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.0	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.0	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroform	5.0	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.0	ug/Kg	1.0	U	U	Yes	
Benzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Trichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	5.0	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.0	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
Toluene	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.0	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
Styrene	5.0	ug/Kg	1.0	U	U	Yes	
Bromoform	5.0	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.0	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5L86	Lab Code:	MITKEM
Sample Number:	VHBLK5Q	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :	0.00000			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Vinyl chloride	5.0	ug/Kg	1.0	U	U	Yes	
Bromomethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Trichlorofluoromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/Kg	1.0	U	U	Yes	
Acetone	10	ug/Kg	1.0	U	U	Yes	
Carbon disulfide	5.0	ug/Kg	1.0	U	U	Yes	
Methyl acetate	5.0	ug/Kg	1.0	U	U	Yes	
Methylene chloride	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methyl tert-butyl ether	5.0	ug/Kg	1.0	U	U	Yes	
1,1-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,2-Dichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Butanone	10	ug/Kg	1.0	U	U	Yes	
Bromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
Chloroform	5.0	ug/Kg	1.0	U	U	Yes	
1,1,1-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Cyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
Carbon tetrachloride	5.0	ug/Kg	1.0	U	U	Yes	
Benzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dioxane	100	ug/Kg	1.0	U	R	Yes	
Trichloroethene	5.0	ug/Kg	1.0	U	U	Yes	
Methylcyclohexane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichloropropane	5.0	ug/Kg	1.0	U	U	Yes	
Bromodichloromethane	5.0	ug/Kg	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	ug/Kg	1.0	U	U	Yes	
cis-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/Kg	1.0	U	U	Yes	
Toluene	5.0	ug/Kg	1.0	U	U	Yes	
trans-1,3-Dichloropropene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2-Trichloroethane	5.0	ug/Kg	1.0	U	U	Yes	
Tetrachloroethene	5.0	ug/Kg	1.0	U	U	Yes	
2-Hexanone	10	ug/Kg	1.0	U	U	Yes	
Dibromochloromethane	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromoethane	5.0	ug/Kg	1.0	U	U	Yes	
Chlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
Ethylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
o-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
m,p-Xylene	5.0	ug/Kg	1.0	U	U	Yes	
Styrene	5.0	ug/Kg	1.0	U	U	Yes	
Bromoform	5.0	ug/Kg	1.0	U	U	Yes	
Isopropylbenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	5.0	ug/Kg	1.0	U	U	Yes	
1,3-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,4-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	5.0	ug/Kg	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	5.0	ug/Kg	1.0	U	U	Yes	

National Functional Guidelines Report #09

Lab MITKEM(Mitkem Laboratories) **SDG** E5L86 **Case** 42079 **Contract** EPW11033 **Region** 5 **DDTID** 141823 **SOW** SOM01.2

Tentatively Identified Compounds

VOA_Low_Med **Sample=E5L97** **Location=SO-2** **Matrix=Soil** **Level=Low**

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
556-67-2	Cyclotetrasiloxane, octamethyl-	10.993	24 ug/Kg		NJ

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 10 Jan 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: DEPA

We have reviewed the data for the following case:

SITE NAME: Mullins Beaver Products (OH)

CASE NUMBER: 42079 SDG NUMBER: E5L84

Number and Type of Samples: 6 soil samples

Sample Numbers: E5L84; L97; E5LA5-A8

Laboratory: MHkem Hrs for Review: _____

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J



Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number E5L86

Laboratory Name	<u>Mitkem Laboratories</u>	Lab Code	<u>MITKEM</u>
Contract No.	<u>EP-W-11-033</u>	Case No.	<u>42079</u>
Analysis Price	<u>\$430</u>	SDG Turnaround	<u>21 days</u>

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) E5L86	08) E5LA8		
02) E5L86MS			
03) E5L86MSD			
04) E5L97			
05) E5LA5			
06) E5LA6			
07) E5LA7			

First Sample in SDG

E5L86

Last Sample in SDG

E5LA8

First Sample Receipt Date

12/14/2011

Last Sample Receipt Date

12/16/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature

Agnes R. Huntley

Date 12/22/2011



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E 5L86

L

Date Shipped: 12/13/2011 Carrier Name: FedEx Airbill: 848838425670 Shipped to: Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400	Chain of Custody Record		Sampler Signature: <i>[Signature]</i>	For Lab Use Only Lab Contract No: EP-W-11-033 Unit Price: \$430 Transfer To: — Lab Contract No: — Unit Price: —
	Relinquished By (Date / Time)	Received By (Date / Time)		
	<i>[Signature]</i> 12/13/11 1630	<i>[Signature]</i> 12/14/11 8:55		
	2			
	3			
4				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5L86	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001662 (Ice Only), 5C-001663 (Ice Only), 5C-001664 (Ice Only), 5C-001665 (Ice Only), 5C-001666 (Ice Only), 5C-001667 (Ice Only), 5C-001668 (Ice Only), 5C-001669 (Ice Only), 5C-001670 (Ice Only), 5C-001671 (Ice Only) (10)	SO-1	S: 12/13/2011 12:49		Good
E5LB2	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121843 (HCL), 5C-121844 (HCL), 5C-121845 (HCL), 5C-121846 (HCL), 5C-121847 (HCL), 5C-121848 (HCL), 5C-121849 (HCL), 5C-121850 (HCL), 5C-121851 (HCL) (9)	Dry Well	S: 12/13/2011 13:00		
E5LB3	Ground Water/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001639 (HCL), 5C-001640 (HCL), 5C-001641 (HCL) (3)	GW-1	S: 12/13/2011 11:30		
E5LB9	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001856 (HCL), 5C-001857 (HCL), 5C-001858 (HCL) (3)	RW-1	S: 12/13/2011 11:50		
E5LC0	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001859 (HCL), 5C-001860 (HCL), 5C-001861 (HCL) (3)	RW-2	12/13/11 1530		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E5L86, E5LB2	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 20°C	Chain of Custody Seal Number: 29185, 103179
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <i>Y</i>	Shipment Iced? <i>Y</i>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

TR Number: 5-131260284-121311-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E5L86

L

Date Shipped: 12/14/2011
Carrier Name: FedEx
Airbill: 848838425680
Shipped to: Mitkem Corporation
175 Metro Center Blvd.
Warwick RI 02886
(401) 732-3400

Chain of Custody Record

Relinquished By

(Date / Time)

Sampler
Signature:

Received By

(Date / Time)

1 *[Signature]* 12/14/11 1700

2 *[Signature]* 12-15-11 9:30

3

4

For Lab Use Only

Lab Contract No: EP-W-11-033

Unit Price: \$ 480

Transfer To:

Lab Contract No:

Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5L97	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001619 (Ice Only), 5C-001620 (Ice Only), 5C-001621 (Ice Only), 5C-001622 (Ice Only) (4)	SO-2	S: 12/14/2011 13:50		Good
E5LB7	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001850 (HCL), 5C-001851 (HCL), 5C-001852 (HCL) (3)	Mullins PW1	S: 12/14/2011 14:30		
E5LB8	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001853 (HCL), 5C-001854 (HCL), 5C-001855 (HCL) (3)	Mullins PW2	S: 12/14/2011 14:45		
E5LC1	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001862 (HCL), 5C-001863 (HCL), 5C-001864 (HCL) (3)	RW-3	S: 12/14/2011 11:15		
E5LC2	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001865 (HCL), 5C-001866 (HCL), 5C-001867 (HCL) (3)	RW-4	S: 12/14/2011 11:40		
E5LC5	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001874 (HCL), 5C-001875 (HCL), 5C-001876 (HCL) (3)	PW-43	S: 12/14/2011 10:30		
E5LC9	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001886 (HCL), 5C-001887 (HCL), 5C-001888 (HCL) (3)	PW-45	S: 12/14/2011 10:00		
E5LD0	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001889 (HCL), 5C-001890 (HCL), 5C-001891 (HCL) (3)	PW-8	S: 12/14/2011 9:30		
E5LD3	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001898 (HCL), 5C-001899 (HCL), 5C-001900 (HCL) (3)	TB-2	S: 12/12/2011 12:00		

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 8.0 °C	Chain of Custody Seal Number: 29184, 103174
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

TR Number: 5-131260284-121411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E5286

L

Date Shipped: 12/15/2011 Carrier Name: FedEx Airbill: 848838425761 Shipped to: Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400	Chain of Custody Record		Sampler Signature: <i>[Signature]</i>
	Relinquished By	(Date / Time)	Received By
	<i>[Signature]</i>	12/15/11	<i>[Signature]</i>
	2		
	3		
4			
For Lab Use Only			
Lab Contract No: EP-W-11-033			
Unit Price: \$430			
Transfer To: —			
Lab Contract No: —			
Unit Price: —			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5LA5	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001813 (Ice Only), 5C-001814 (Ice Only), 5C-001815 (Ice Only), 5C-001816 (Ice Only) (4)	SO-3	S: 12/15/2011 9:50		Good
E5LA6	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001817 (Ice Only), 5C-001818 (Ice Only), 5C-001819 (Ice Only), 5C-001820 (Ice Only) (4)	SO-4	S: 12/15/2011 11:20		
E5LA7	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001821 (Ice Only), 5C-001822 (Ice Only), 5C-001823 (Ice Only), 5C-001824 (Ice Only) (4)	SO-5	S: 12/15/2011 13:00		
E5LA8	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001825 (Ice Only), 5C-001826 (Ice Only), 5C-001827 (Ice Only), 5C-001828 (Ice Only) (4)	SO-6	S: 12/15/2011 13:45		Good
E5LC3	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001868 (HCL), 5C-001869 (HCL), 5C-001870 (HCL) (3)	PW-9	S: 12/15/2011 9:15		
E5LC8	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001883 (HCL), 5C-001884 (HCL), 5C-001885 (HCL) (3)	PW-46	S: 12/15/2011 9:45		
E5LD4	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-101998 (HCL), 5C-101999 (HCL), 5C-102000 (HCL) (3)	TB-3	S: 12/12/2011 12:00		

Soil Field Sample

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 8.0	Chain of Custody Seal Number: 29192-29193
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

TR Number: 5-131260284-121511-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

SDG Narrative

Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division submits the enclosed data package in response to USEPA Case # 42079 and SDG# E5L86. Analyses were performed for six soil samples that were received on December 14 and December 16, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that the sample-shipping cooler received on December 15 was measured at 4.0°C. The temperature of the cooler received on December 16 was measured at 8.0°C.

The following samples are submitted in this data package:

<u>Client ID</u>	<u>Lab ID</u>	<u>Analysis</u>
E5L86	K2628-01B	V
E5L86MS	K2628-01BMS	V
E5L86MSD	K2628-01BMSD	V
E5L97	K2628-02B	V
E5LA5	K2628-03B	V
E5LA6	K2628-04B	V
E5LA7	K2628-05B	V
E5LA8	K2628-06B	V

V = Low/Medium Volatiles

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (SOM01.2) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

SAMPLE RECEIPT:

The soil samples were received in Encore samplers. The samples were logged in, labeled and transferred to the VOA laboratory. Once in the VOA laboratory, the samples were extruded into an unpreserved VOA vials. The VOA vials containing the samples were then placed into the freezer and kept frozen until time of analysis.

Low/Medium Volatile Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP SOM 1.2 VOC

The following equation was used to calculate the concentration of target analytes for low-level soil samples:

$$\text{Concentration } (\mu\text{g/Kg}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(5)}{\left(\frac{W_s * (100 - M)}{100} \right)}$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
Ws = Weight of sample extracted (g)
M = %moisture (not decanted)

The following equation was used to calculate the Amt in the previous equations:

$$\text{Amt} = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured
 A_{is} = area of the characteristic ion for the associated internal standard
IS = concentration of internal standard in ug/L
RRF = relative response factor

III. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW5035

IV. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: V5

Instrument Type: GCMS-VOA

Description: HP6890 / HP6890

Manufacturer: Hewlett-Packard

Model: 6890 / 6890

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

Secondary ion 65 was used in the quantitation of 1,1-dichloroethene-d2 instead of primary ion 63 due to the interference with target compound 1,1-dichloroethene in the calibration standards.

B. Blanks:

All method blanks were within the acceptance criteria.

C. DMC Recoveries:

DMC recoveries were within the QC limits with the exception of the following:

E5LA5: recovery is below criteria for Vinyl chloride-d3 at 57% with criteria of (68-122).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample E5L86.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

cis-1,3-Dichloropropene-d4 was detected in method blanks and in samples. The volatile organic deuterated monitoring compound spike solution contains both the cis- and trans-1,3-dichloropropene isomers. cis-1,3-Dichloropropene-d4 is not a deuterated monitoring compound for SOM01.2, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

For 1,4-dioxane and 1,4-dioxane-d8, the laboratory was unable to meet the minimum average RRF of 0.0050 in the initial calibration. In our experience, this compound will not reliably achieve the SOM method performance criteria due to its high water solubility. This compound is able to be reliably analyzed as an extractable semivolatile organic compound.

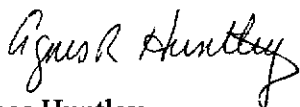
No other unusual observations were made for the analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.



Agnes Huntley
CLP Project Manager
01/04/12

2C - FORM II VOA-3
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLK5P	103	104	94	89	90	95	95
02	E5L86MS	96	93	101	83	87	82	106
03	E5L86MSD	97	94	106	78	86	80	106
04	E5L86	97	96	101	90	87	87	103
05	E5L97	96	100	99	73	91	93	100
06	VBLK5Q	97	94	100	96	89	97	93
07	E5LA5	57 *	67	98	80	93	90	109
08	E5LA6	93	90	101	72	84	82	101
09	E5LA7	88	88	94	81	85	88	101
10	E5LA8	88	89	100	81	87	87	104
11	VHBLK5Q	92	96	102	102	89	96	100

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(68-122)
VDMC2	(CLA) = Chloroethane-d5	(61-130)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(45-132)
VDMC4	(BUT) = 2-Butanone-d5	(20-182)
VDMC5	(CLF) = Chloroform-d	(72-123)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(79-122)
VDMC7	(BEN) = Benzene-d6	(80-121)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2D - FORM II VOA-4
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	VBLK5P	83	96	92	76	81	85	95	0
02	E5L86MS	88	111	91	76	91	87	92	0
03	E5L86MSD	87	108	89	72	69	78	96	0
04	E5L86	87	105	94	85	85	89	94	0
05	E5L97	85	101	83	61	72	80	89	0
06	VBLK5Q	80	95	93	85	111	87	95	0
07	E5LA5	87	116	96	66	66	84	96	1
08	E5LA6	82	104	85	53	78	70	90	0
09	E5LA7	83	104	87	64	73	80	99	0
10	E5LA8	86	107	89	68	72	81	92	0
11	VHBLK5Q	82	102	94	92	87	86	94	0

VDMC8 (DPA) = 1,2-Dichloropropane-d6
VDMC9 (TOL) = Toluene-d8
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4
VDMC11 (HEX) = 2-Hexanone-d5
VDMC12 (DXE) = 1,4-Dioxane-d8
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4

QC LIMITS

(74-124)
(78-121)
(72-130)
(17-184)
(50-150)
(56-161)
(70-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3B - FORM III VOA-2

Lab Name:	MITKEM LABORATORIES	Contract:	EP-W-11-033
Lab Code:	MITKEM	Case No.:	42079
		Mod. Ref No.:	SDG No.: E5L86
Matrix Spike - EPA Sample No.: E5L86		Level:	(LOW/MED) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	49.9221	0.0000	48.3799	97		59-172
Benzene	49.9221	0.0000	55.5853	111		66-142
Trichloroethene	49.9221	0.0000	60.3095	121		62-137
Toluene	49.9221	0.0000	54.6502	109		59-139
Chlorobenzene	49.9221	0.0000	55.1647	111		60-133

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC #		%RPD #		QC LIMITS	
							RPD	REC.
1,1-Dichloroethene	49.9221	47.7065	96		1		0-22	59-172
Benzene	49.9221	54.0451	108		3		0-21	66-142
Trichloroethene	49.9221	57.5620	115		5		0-24	62-137
Toluene	49.9221	53.3183	107		2		0-21	59-139
Chlorobenzene	49.9221	54.1330	108		2		0-21	60-133

```
# Column to be used to flag recovery and RPD values with an asterisk
```

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBK5P

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Lab File ID: V5N4143.D Lab Sample ID: MB-63759
Instrument ID: V5
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/24/2011
Level: (TRACE or LOW/MED) LOW Time Analyzed: 2:20
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5L86MS	K2628-01BMS	V5N4152.D	6:18
02	E5L86MSD	K2628-01BMDS	V5N4153.D	6:46
03	E5L86	K2628-01B	V5N4154.D	7:13
04	E5L97	K2628-02B	V5N4155.D	7:40

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Lab File ID: V5N4169.D Lab Sample ID: MB-63760
Instrument ID: V5
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/24/2011
Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:56
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LA5	K2628-03B	V5N4170.D	16:17
02	E5LA6	K2628-04B	V5N4171.D	16:45
03	E5LA7	K2628-05B	V5N4172.D	17:12
04	E5LA8	K2628-06B	V5N4173.D	17:40
05	VHBLK5Q	VHBLK5Q	V5N4179.D	22:34

COMMENTS:

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/27/2011 11/27/2011
 EPA Sample No. (VSTD#####): VSTD0505P Date Analyzed: 12/24/2011
 Lab File ID (Standard): V5N4142.D Time Analyzed: 1:53
 Instrument ID: V5 Heated Purge: (Y/N) Y

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	647988	9.427	751505	6.326	260737	12.167
UPPER LIMIT	1295976	9.927	1503010	6.826	521474	12.667
LOWER LIMIT	323994	8.927	375753	5.826	130369	11.667
EPA SAMPLE NO.						
01 VBLK5P	756781	9.425	922384	6.324	330516	12.177
02 E5L86MS	788527	9.431	1074263	6.319	306867	12.184
03 E5L86MSD	789794	9.425	1065327	6.324	289475	12.177
04 E5L86	939468	9.426	1220486	6.314	378098	12.178
05 E5L97	708752	9.437	900056	6.324	279507	12.177

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/27/2011 11/27/2011
 EPA Sample No. (VSTD#####): VSTD0505Q Date Analyzed: 12/24/2011
 Lab File ID (Standard): V5N4168.D Time Analyzed: 13:29
 Instrument ID: V5 Heated Purge: (Y/N) Y

		IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	630877	9.426	774674	6.325	276360	12.167
	UPPER LIMIT	1261754	9.926	1549348	6.825	552720	12.667
	LOWER LIMIT	315439	8.926	387337	5.825	138180	11.667
	EPA SAMPLE NO.						
01	VBLK5Q	883127	9.426	1075155	6.314	359866	12.179
02	E5LA5	723233	9.432	947176	6.320	273357	12.185
03	E5LA6	719665	9.429	944427	6.316	264265	12.181
04	E5LA7	703471	9.426	913434	6.325	252376	12.178
05	E5LA8	667246	9.426	881466	6.314	255813	12.178
06	VHBLK5Q	751973	9.430	953046	6.318	294404	12.183

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01B
Sample wt/vol: 6.50 (g/mL) G Lab File ID: V5N4154.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG	Q
75-71-8	Dichlorodifluoromethane	4.5	U
74-87-3	Chloromethane	4.5	U
75-01-4	Vinyl chloride	4.5	U
74-83-9	Bromomethane	4.5	U
75-00-3	Chloroethane	4.5	U
75-69-4	Trichlorofluoromethane	4.5	U
75-35-4	1,1-Dichloroethene	4.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.5	U
67-64-1	Acetone	9.1	U
75-15-0	Carbon disulfide	4.5	U
79-20-9	Methyl acetate	4.5	U
75-09-2	Methylene chloride	4.5	U
156-60-5	trans-1,2-Dichloroethene	4.5	U
1634-04-4	Methyl tert-butyl ether	4.5	U
75-34-3	1,1-Dichloroethane	4.5	U
156-59-2	cis-1,2-Dichloroethene	4.5	U
78-93-3	2-Butanone	9.1	U
74-97-5	Bromochloromethane	4.5	U
67-66-3	Chloroform	4.5	U
71-55-6	1,1,1-Trichloroethane	4.5	U
110-82-7	Cyclohexane	4.5	U
56-23-5	Carbon tetrachloride	4.5	U
71-43-2	Benzene	4.5	U
107-06-2	1,2-Dichloroethane	4.5	U
123-91-1	1,4-Dioxane	91	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01B
Sample wt/vol: 6.50 (g/mL) G Lab File ID: V5N4154.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/KG</u>	Q
79-01-6	Trichloroethene	4.5	U
108-87-2	Methylcyclohexane	4.5	U
78-87-5	1,2-Dichloropropane	4.5	U
75-27-4	Bromodichloromethane	4.5	U
10061-01-5	cis-1,3-Dichloropropene	4.5	U
108-10-1	4-Methyl-2-pentanone	9.1	U
108-88-3	Toluene	4.5	U
10061-02-6	trans-1,3-Dichloropropene	4.5	U
79-00-5	1,1,2-Trichloroethane	4.5	U
127-18-4	Tetrachloroethene	4.5	U
591-78-6	2-Hexanone	9.1	U
124-48-1	Dibromochloromethane	4.5	U
106-93-4	1,2-Dibromoethane	4.5	U
108-90-7	Chlorobenzene	4.5	U
100-41-4	Ethylbenzene	4.5	U
179601-23-1	m,p-Xylene	4.5	U
95-47-6	o-Xylene	4.5	U
100-42-5	Styrene	4.5	U
75-25-2	Bromoform	4.5	U
98-82-8	Isopropylbenzene	4.5	U
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U
541-73-1	1,3-Dichlorobenzene	4.5	U
106-46-7	1,4-Dichlorobenzene	4.5	U
95-50-1	1,2-Dichlorobenzene	4.5	U
96-12-8	1,2-Dibromo-3-chloropropane	4.5	U
120-82-1	1,2,4-Trichlorobenzene	4.5	U
87-61-6	1,2,3-Trichlorobenzene	4.5	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5L86

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01B
 Sample wt/vol: 6.50 (g/mL) G Lab File ID: V5N4154.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/14/2011
 % Moisture: not dec. 15 Date Analyzed: 12/24/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01BMS
Sample wt/vol: 5.90 (g/mL) G Lab File ID: V5N4152.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	48	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	56	
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01BMS

Sample wt/vol: 5.90 (g/mL) G Lab File ID: V5N4152.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011

% Moisture: not dec. 15 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	60	
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	55	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	55	
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01BMSD
Sample wt/vol: 5.90 (g/mL) G Lab File ID: V5N4153.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	48	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	54	
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-01BMSD
Sample wt/vol: 5.90 (g/mL) G Lab File ID: V5N4153.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/14/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG	Q
79-01-6	Trichloroethene	58	
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	54	
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L97

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-02B
Sample wt/vol: 5.80 (g/mL) G Lab File ID: V5N4155.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/15/2011
% Moisture: not dec. 8.2 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-71-8	Dichlorodifluoromethane	4.7	U
74-87-3	Chloromethane	4.7	U
75-01-4	Vinyl chloride	4.7	U
74-83-9	Bromomethane	4.7	U
75-00-3	Chloroethane	4.7	U
75-69-4	Trichlorofluoromethane	4.7	U
75-35-4	1,1-Dichloroethene	4.7	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.7	U
67-64-1	Acetone	9.4	U
75-15-0	Carbon disulfide	4.7	U
79-20-9	Methyl acetate	4.7	U
75-09-2	Methylene chloride	4.7	U
156-60-5	trans-1,2-Dichloroethene	4.7	U
1634-04-4	Methyl tert-butyl ether	4.7	U
75-34-3	1,1-Dichloroethane	4.7	U
156-59-2	cis-1,2-Dichloroethene	4.7	U
78-93-3	2-Butanone	9.4	U
74-97-5	Bromochloromethane	4.7	U
67-66-3	Chloroform	4.7	U
71-55-6	1,1,1-Trichloroethane	4.7	U
110-82-7	Cyclohexane	4.7	U
56-23-5	Carbon tetrachloride	4.7	U
71-43-2	Benzene	4.7	U
107-06-2	1,2-Dichloroethane	4.7	U
123-91-1	1,4-Dioxane	94	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L97

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-02B
Sample wt/vol: 5.80 (g/mL) G Lab File ID: V5N4155.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/15/2011
% Moisture: not dec. 8.2 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
79-01-6	Trichloroethene	4.7	U
108-87-2	Methylcyclohexane	4.7	U
78-87-5	1,2-Dichloropropane	4.7	U
75-27-4	Bromodichloromethane	4.7	U
10061-01-5	cis-1,3-Dichloropropene	4.7	U
108-10-1	4-Methyl-2-pentanone	9.4	U
108-88-3	Toluene	4.7	U
10061-02-6	trans-1,3-Dichloropropene	4.7	U
79-00-5	1,1,2-Trichloroethane	4.7	U
127-18-4	Tetrachloroethene	4.7	U
591-78-6	2-Hexanone	9.4	U
124-48-1	Dibromochloromethane	4.7	U
106-93-4	1,2-Dibromoethane	4.7	U
108-90-7	Chlorobenzene	4.7	U
100-41-4	Ethylbenzene	4.7	U
179601-23-1	m,p-Xylene	4.7	U
95-47-6	o-Xylene	4.7	U
100-42-5	Styrene	4.7	U
75-25-2	Bromoform	4.7	U
98-82-8	Isopropylbenzene	4.7	U
79-34-5	1,1,2,2-Tetrachloroethane	4.7	U
541-73-1	1,3-Dichlorobenzene	4.7	U
106-46-7	1,4-Dichlorobenzene	4.7	U
95-50-1	1,2-Dichlorobenzene	4.7	U
96-12-8	1,2-Dibromo-3-chloropropane	4.7	U
120-82-1	1,2,4-Trichlorobenzene	4.7	U
87-61-6	1,2,3-Trichlorobenzene	4.7	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5L97

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-02B
 Sample wt/vol: 5.80 (g/mL) G Lab File ID: V5N4155.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/15/2011
 % Moisture: not dec. 8.2 Date Analyzed: 12/24/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	556-67-2	Cyclotetrasiloxane, octameth	10.993	24	NJ
	E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-03B
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N4170.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 8.1 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/Kg}$	Q
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	U
67-64-1	Acetone	12	
75-15-0	Carbon disulfide	5.2	U
79-20-9	Methyl acetate	5.2	U
75-09-2	Methylene chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
1634-04-4	Methyl tert-butyl ether	5.2	U
75-34-3	1,1-Dichloroethane	5.2	U
156-59-2	cis-1,2-Dichloroethene	5.2	U
78-93-3	2-Butanone	10	J
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
110-82-7	Cyclohexane	5.2	U
56-23-5	Carbon tetrachloride	5.2	U
71-43-2	Benzene	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-03B
Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N4170.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 8.1 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
79-01-6	Trichloroethene		5.2	U
108-87-2	Methylcyclohexane		5.2	U
78-87-5	1,2-Dichloropropane		5.2	U
75-27-4	Bromodichloromethane		5.2	U
10061-01-5	cis-1,3-Dichloropropene		5.2	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		5.2	U
10061-02-6	trans-1,3-Dichloropropene		5.2	U
79-00-5	1,1,2-Trichloroethane		5.2	U
127-18-4	Tetrachloroethene		100	
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		5.2	U
106-93-4	1,2-Dibromoethane		5.2	U
108-90-7	Chlorobenzene		5.2	U
100-41-4	Ethylbenzene		5.2	U
179601-23-1	m,p-Xylene		5.2	U
95-47-6	o-Xylene		5.2	U
100-42-5	Styrene		5.2	U
75-25-2	Bromoform		5.2	U
98-82-8	Isopropylbenzene		5.2	U
79-34-5	1,1,2,2-Tetrachloroethane		5.2	U
541-73-1	1,3-Dichlorobenzene		5.2	U
106-46-7	1,4-Dichlorobenzene		5.2	U
95-50-1	1,2-Dichlorobenzene		5.2	U
96-12-8	1,2-Dibromo-3-chloropropane		5.2	U
120-82-1	1,2,4-Trichlorobenzene		5.2	U
87-61-6	1,2,3-Trichlorobenzene		5.2	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LA5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-03B
 Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N4170.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/16/2011
 % Moisture: not dec. 8.1 Date Analyzed: 12/24/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-04B
Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N4171.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 19 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorofluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-04B

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N4171.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011

% Moisture: not dec. 19 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/KG</u>	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
179601-23-1	m,p-Xylene	6.3	U
95-47-6	o-Xylene	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LA6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-04B

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N4171.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/16/2011

% Moisture: not dec. 19 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-05B
Sample wt/vol: 4.70 (g/mL) G Lab File ID: V5N4172.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorofluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E51A7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-05B
Sample wt/vol: 4.70 (g/mL) G Lab File ID: V5N4172.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 15 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
179601-23-1	m,p-Xylene	6.3	U
95-47-6	o-Xylene	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LA7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-05B

Sample wt/vol: 4.70 (g/mL) G Lab File ID: V5N4172.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/16/2011

% Moisture: not dec. 15 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) uG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679(1)	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LA8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-06B
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V5N4173.D
Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011
% Moisture: not dec. 18 Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
75-71-8	Dichlorodifluoromethane	5.6	U	
74-87-3	Chloromethane	5.6	U	
75-01-4	Vinyl chloride	5.6	U	
74-83-9	Bromomethane	5.6	U	
75-00-3	Chloroethane	5.6	U	
75-69-4	Trichlorofluoromethane	5.6	U	
75-35-4	1,1-Dichloroethene	5.6	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	U	
67-64-1	Acetone	11	U	
75-15-0	Carbon disulfide	5.6	U	
79-20-9	Methyl acetate	5.6	U	
75-09-2	Methylene chloride	5.6	U	
156-60-5	trans-1,2-Dichloroethene	5.6	U	
1634-04-4	Methyl tert-butyl ether	5.6	U	
75-34-3	1,1-Dichloroethane	5.6	U	
156-59-2	cis-1,2-Dichloroethene	5.6	U	
78-93-3	2-Butanone	11	U	
74-97-5	Bromochloromethane	5.6	U	
67-66-3	Chloroform	5.6	U	
71-55-6	1,1,1-Trichloroethane	5.6	U	
110-82-7	Cyclohexane	5.6	U	
56-23-5	Carbon tetrachloride	5.6	U	
71-43-2	Benzene	5.6	U	
107-06-2	1,2-Dichloroethane	5.6	U	
123-91-1	1,4-Dioxane	110	U	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5L86

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-06B

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V5N4173.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/16/2011

% Moisture: not dec. 18 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
79-01-6	Trichloroethene	5.6	U
108-87-2	Methylcyclohexane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
75-27-4	Bromodichloromethane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
127-18-4	Tetrachloroethene	5.6	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	5.6	U
106-93-4	1,2-Dibromoethane	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethylbenzene	5.6	U
179601-23-1	m,p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
100-42-5	Styrene	5.6	U
75-25-2	Bromoform	5.6	U
98-82-8	Isopropylbenzene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
541-73-1	1,3-Dichlorobenzene	5.6	U
106-46-7	1,4-Dichlorobenzene	5.6	U
95-50-1	1,2-Dichlorobenzene	5.6	U
96-12-8	1,2-Dibromo-3-chloropropane	5.6	U
120-82-1	1,2,4-Trichlorobenzene	5.6	U
87-61-6	1,2,3-Trichlorobenzene	5.6	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LA8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2628-06B

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V5N4173.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/16/2011

% Moisture: not dec. 18 Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5P

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63759
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4143.D
Level: (TRACE/LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5P

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63759
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4143.D
Level: (TRACE/LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/KG	
79-01-6	Trichloroethene	5.0	U	
108-87-2	Methylcyclohexane	5.0	U	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	10	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	5.0	U	
591-78-6	2-Hexanone	10	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
179601-23-1	m,p-Xylene	5.0	U	
95-47-6	o-Xylene	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5P

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63759
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4143.D
Level: (TRACE or LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63760
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4169.D
Level: (TRACE/LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63760

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4169.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-63760
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4169.D
 Level: (TRACE or LOW/MED) LOW Date Received:
 % Moisture: not dec. Date Analyzed: 12/24/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLK5Q
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4179.D
Level: (TRACE/LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/KG}$	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLK5Q
Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4179.D
Level: (TRACE/LOW/MED) LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/24/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/KG	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5Q

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5L86

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLK5Q

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N4179.D

Level: (TRACE or LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 12/24/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ~ REGION V

**ESD Central Regional Laboratory
Data Tracking Form for Contract Samples**

Sample Delivery Group: E5186 CERCLIS No: 04HN000510489
 Case No: 42079 Site Name/Location: MULLINS Rubber Products
 Contractor or EPA Lab: Mitkem Data User: OEPA
 No. of Samples: 6 Date Sampled or Date Received: 10 Jan 2012

Have Chain-of-Custody records been received? Yes ☒ No ☐
 Have traffic reports or packing lists been received? Yes ☒ No ☐
 If no, are traffic reports or packing list numbers written on the Chain-of-Custody Record?
 Yes ☐ No ☐
 If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ☒ No ☐
 No of samples claimed: 6 No. of samples received: _____

Received by: Patt Joeyner Date: 10 Jan 2012

Received by LSSS: Patt Joeyner Date: 12 Jan 2012

Review started: 1-31-12 Reviewer Signature: Dolmah Cornett

Total time spent on review: 4 Date review completed: 2-1-12

Copied by: A. C. Hawey Date: Feb 6, 2012

Mailed to user by: Patt Joeyner Date: 8 FEB 2012

DATA USER:

Please fill in the blanks below and return this form to:
 Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
Organic Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
Dioxin data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
SAS Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: _____

ESAT5.316.00163

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

ack
2-6-12

DATE:

SUBJECT: Review of Data
Received for Review on: 10 January 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: OEPA
Wendy.vorwerk@epa.state.oh.us

Level 3 Data Validation

We have reviewed the data for the following case:

SITE Name: Mullins Rubber Products (OH)

Case Number: 42079

SDG Number: E5LB2

Number and Type of Samples: 20 Waters (trace volatiles)

Sample Numbers: E5LB2, E5LB3, E5LB7-E5LB9, E5LC0-E5LC9, E5LD0-E5LD4

Laboratory: Mitkem Laboratories

Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J

Case Number: 42079

SDG Number: E5LB2

Site Name: Mullins Rubber Products (OH)

Laboratory: Mitkem Laboratories

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Twenty (20) preserved water samples labeled E5LB2, E5LB3, E5LB7-E5LB9, E5LC0-E5LC9 and E5LD0-E5LD4, were shipped to Mitkem Laboratories located in Warwick, RI. All samples were collected between 12/12/11 and 12/15/11 and received between 12/14/11 and 12/16/11 intact. Nine (9) samples arrived at the proper shipping temperature range of 2 - 6°C. Eleven (11) samples; E5LB7, E5LB8, E5LC1-E5LC3, E5LC5, E5LC8, E5LC9, E5LD0, E5LD3 and E5LD4 arrived in coolers with temperatures of 8.0°C. Sample results are not qualified for this discrepancy.

All samples were analyzed for the trace volatile list of compounds. All samples were analyzed according to CLP SOW SOM01.2 (6/2007) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.6).

Sample E5LB2 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

Samples E5LD2, E5LD3 and E5LD4 were trip blanks.

No samples were identified as field duplicates.

1. HOLDING TIME

No Problems Found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No Problems Found.

3. CALIBRATION

No Problems Found.

4. BLANKS

The following trace volatile samples were analyzed after a sample with compounds exceeding calibration and no intervening instrument blank. Detection of these compounds should be qualified "J" as they may be a result of carryover.

E5LB2MS, E5LB2MSD, E5LB3, E5LB8
Tetrachloroethene

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

No Problems Found.

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E5LB2 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No Problems Found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to trace volatile analyses.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field duplicates.

Samples E5LD2, E5LD3 and E5LD4 were trip blanks. Results are summarized in the following table:

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 4 of 6
SDG Number: E5LB2
Laboratory: Mitkem Laboratories

	E5LD2	E5LD3	E5LD4
Trace Volatile analytes:	µg/L	µg/L	µg/L
Acetone	5.2	6.8	5.4
# of TVOA TICs	0	0	0

8. INTERNAL STANDARDS

No Problems Found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all trace volatile compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following trace volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E5LB3, E5LD1
Tetrachloroethene

E5LB7
Trichloroethene

E5LC5
1,1-Dichloroethane

E5LC8
Chloroform

E5LC9
1,1,1-Trichloroethane, Trichloroethene

VBLK5B
Methylene chloride

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 5 of 6
SDG Number: E5LB2
Laboratory: Mitkem Laboratories

12. ADDITIONAL INFORMATION

The following trace volatile samples have reported concentrations that exceed the instrument's linear calibration range. The results are flagged "E" by the laboratory and are estimated "J". The results from the diluted samples should be used for result validation.

E5LB2, E5LB7, E5LB8
Tetrachloroethene

The following trace volatile samples have reported concentrations that exceeded the instrument's linear calibration range. These results were flagged "E" by the lab and are estimated "J". No further diluted analysis was performed since these samples were used for QC purposes only.

E5LB2MS, E5LB2MSD
Tetrachloroethene

Sample tags were missing for samples E5LB7, E5LB8, E5LC1- E5LC3, E5LC5, E5LC8, E5LC9, E5LD0, E5LD3 and E5LD4.

Reviewed by: Deborah Connet / Techlaw-ESAT
Date: 2/6/2012

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 6 of 6
SDG Number: E5LB2
Laboratory: Mitkem Laboratories

CADRE Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Sample Summary Report

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB2	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Dry Well	pH:	2.0	Sample Date:	12132011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	1.4	ug/L	1.0			Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	56	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB2DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Dry Well	pH:	2.0	Sample Date:	12132011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	4.0	ug/L	8.0	U	U	Yes	
Chloromethane	4.0	ug/L	8.0	U	U	Yes	
Vinyl chloride	4.0	ug/L	8.0	U	U	Yes	
Bromomethane	4.0	ug/L	8.0	U	U	Yes	
Chloroethane	4.0	ug/L	8.0	U	U	Yes	
Trichlorofluoromethane	4.0	ug/L	8.0	U	U	Yes	
1,1-Dichloroethene	4.0	ug/L	8.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	ug/L	8.0	U	U	Yes	
Acetone	40	ug/L	8.0	U	U	Yes	
Carbon disulfide	4.0	ug/L	8.0	U	U	Yes	
Methyl acetate	4.0	ug/L	8.0	U	U	Yes	
Methylene chloride	4.0	ug/L	8.0	U	U	Yes	
trans-1,2-Dichloroethene	4.0	ug/L	8.0	U	U	Yes	
Methyl tert-butyl ether	4.0	ug/L	8.0	U	U	Yes	
1,1-Dichloroethane	4.0	ug/L	8.0	U	U	Yes	
cis-1,2-Dichloroethene	4.0	ug/L	8.0	U	U	Yes	
2-Butanone	40	ug/L	8.0	U	U	Yes	
Bromochloromethane	4.0	ug/L	8.0	U	U	Yes	
Chloroform	4.0	ug/L	8.0	U	U	Yes	
1,1,1-Trichloroethane	4.0	ug/L	8.0	U	U	Yes	
Cyclohexane	4.0	ug/L	8.0	U	U	Yes	
Carbon tetrachloride	4.0	ug/L	8.0	U	U	Yes	
Benzene	4.0	ug/L	8.0	U	U	Yes	
1,2-Dichloroethane	4.0	ug/L	8.0	U	U	Yes	
Trichloroethene	4.0	ug/L	8.0	U	U	Yes	
Methylcyclohexane	4.0	ug/L	8.0	U	U	Yes	
1,2-Dichloropropane	4.0	ug/L	8.0	U	U	Yes	
Bromodichloromethane	4.0	ug/L	8.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	4.0	ug/L	8.0	U	U	Yes	
4-Methyl-2-pentanone	40	ug/L	8.0	U	U	Yes	
Toluene	4.0	ug/L	8.0	U	U	Yes	
trans-1,3-Dichloropropene	4.0	ug/L	8.0	U	U	Yes	
1,1,2-Trichloroethane	4.0	ug/L	8.0	U	U	Yes	
Tetrachloroethene	76	ug/L	8.0	D		Yes	
2-Hexanone	40	ug/L	8.0	U	U	Yes	
Dibromochloromethane	4.0	ug/L	8.0	U	U	Yes	
1,2-Dibromoethane	4.0	ug/L	8.0	U	U	Yes	
Chlorobenzene	4.0	ug/L	8.0	U	U	Yes	
Ethylbenzene	4.0	ug/L	8.0	U	U	Yes	
o-Xylene	4.0	ug/L	8.0	U	U	Yes	
m,p-Xylene	4.0	ug/L	8.0	U	U	Yes	
Styrene	4.0	ug/L	8.0	U	U	Yes	
Bromoform	4.0	ug/L	8.0	U	U	Yes	
Isopropylbenzene	4.0	ug/L	8.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	4.0	ug/L	8.0	U	U	Yes	
1,3-Dichlorobenzene	4.0	ug/L	8.0	U	U	Yes	
1,4-Dichlorobenzene	4.0	ug/L	8.0	U	U	Yes	
1,2-Dichlorobenzene	4.0	ug/L	8.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	4.0	ug/L	8.0	U	U	Yes	
1,2,4-Trichlorobenzene	4.0	ug/L	8.0	U	U	Yes	
1,2,3-Trichlorobenzene	4.0	ug/L	8.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB2MS	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Dry Well	pH:	2.0	Sample Date:	12132011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	4.8	ug/L	1.0			Yes	
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Benzene	4.8	ug/L	1.0			Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	6.2	ug/L	1.0			Yes	
Toluene	4.7	ug/L	1.0			Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	5.0	ug/L	1.0			Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	57	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB2MSD	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Dry Well	pH:	2.0	Sample Date:	12132011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	4.5	ug/L	1.0			Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Benzene	4.8	ug/L	1.0			Yes	
Trichloroethene	6.2	ug/L	1.0			Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Toluene	4.6	ug/L	1.0			Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	4.9	ug/L	1.0			Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	62	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5LB2	Lab Code: MITKEM
Sample Number: E5LB3	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: GW-1	pH: 2.0	Sample Date: 12132011	Sample Time: 11:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.20	ug/L	1.0	J	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Mullins PW1	pH:	2.0	Sample Date:	12142011	Sample Time:	14:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.47	ug/L	1.0	J	J	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	52	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB7DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Mullins PW1	pH:	7.0	Sample Date:	12142011	Sample Time:	14:30:00
% Moisture :	% Solids :						

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	2.5	ug/L	5.0	U	U	Yes	
Chloromethane	2.5	ug/L	5.0	U	U	Yes	
Vinyl chloride	2.5	ug/L	5.0	U	U	Yes	
Bromomethane	2.5	ug/L	5.0	U	U	Yes	
Chloroethane	2.5	ug/L	5.0	U	U	Yes	
Trichlorofluorom ethane	2.5	ug/L	5.0	U	U	Yes	
1,1-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	ug/L	5.0	U	U	Yes	
Acetone	25	ug/L	5.0	U	U	Yes	
Carbon disulfide	2.5	ug/L	5.0	U	U	Yes	
Methyl acetate	2.5	ug/L	5.0	U	U	Yes	
Methylene chloride	2.5	ug/L	5.0	U	U	Yes	
trans-1,2-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
Methyl tert-butyl ether	2.5	ug/L	5.0	U	U	Yes	
1,1-Dichloroethane	2.5	ug/L	5.0	U	U	Yes	
cis-1,2-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
2-Butanone	25	ug/L	5.0	U	U	Yes	
Bromochloromet hane	2.5	ug/L	5.0	U	U	Yes	
Chloroform	2.5	ug/L	5.0	U	U	Yes	
1,1,1-Trichloroethane	2.5	ug/L	5.0	U	U	Yes	
Cyclohexane	2.5	ug/L	5.0	U	U	Yes	
Carbon tetrachloride	2.5	ug/L	5.0	U	U	Yes	
Benzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichloroethane	2.5	ug/L	5.0	U	U	Yes	
Trichloroethene	2.5	ug/L	5.0	U	U	Yes	
Methylcyclohexa ne	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichloropropane	2.5	ug/L	5.0	U	U	Yes	
Bromodichlorom ethane	2.5	ug/L	5.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	2.5	ug/L	5.0	U	U	Yes	
4-Methyl-2-pentanone	25	ug/L	5.0	U	U	Yes	
Toluene	2.5	ug/L	5.0	U	U	Yes	
trans-1,3-Dichloropropene	2.5	ug/L	5.0	U	U	Yes	
1,1,2-Trichloroethane	2.5	ug/L	5.0	U	U	Yes	
Tetrachloroethene	61	ug/L	5.0	D		Yes	
2-Hexanone	25	ug/L	5.0	U	U	Yes	
Dibromochloromethane	2.5	ug/L	5.0	U	U	Yes	
1,2-Dibromoethane	2.5	ug/L	5.0	U	U	Yes	
Chlorobenzene	2.5	ug/L	5.0	U	U	Yes	
Ethylbenzene	2.5	ug/L	5.0	U	U	Yes	
o-Xylene	2.5	ug/L	5.0	U	U	Yes	
m,p-Xylene	2.5	ug/L	5.0	U	U	Yes	
Styrene	2.5	ug/L	5.0	U	U	Yes	
Bromoform	2.5	ug/L	5.0	U	U	Yes	
Isopropylbenzene	2.5	ug/L	5.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	2.5	ug/L	5.0	U	U	Yes	
1,3-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,4-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	2.5	ug/L	5.0	U	U	Yes	
1,2,4-Trichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2,3-Trichlorobenzene	2.5	ug/L	5.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Mullins PW2	pH:	2.0	Sample Date:	12142011	Sample Time:	14:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.51	ug/L	1.0			Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	54	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB8DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	Mullins PW2	pH:	2.0	Sample Date:	12142011	Sample Time:	14:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	2.5	ug/L	5.0	U	U	Yes	
Chloromethane	2.5	ug/L	5.0	U	U	Yes	
Vinyl chloride	2.5	ug/L	5.0	U	U	Yes	
Bromomethane	2.5	ug/L	5.0	U	U	Yes	
Chloroethane	2.5	ug/L	5.0	U	U	Yes	
Trichlorofluorom ethane	2.5	ug/L	5.0	U	U	Yes	
1,1-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	ug/L	5.0	U	U	Yes	
Acetone	25	ug/L	5.0	U	U	Yes	
Carbon disulfide	2.5	ug/L	5.0	U	U	Yes	
Methyl acetate	2.5	ug/L	5.0	U	U	Yes	
Methylene chloride	2.5	ug/L	5.0	U	U	Yes	
trans-1,2-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
Methyl tert-butyl ether	2.5	ug/L	5.0	U	U	Yes	
1,1-Dichloroethane	2.5	ug/L	5.0	U	U	Yes	
cis-1,2-Dichloroethene	2.5	ug/L	5.0	U	U	Yes	
2-Butanone	25	ug/L	5.0	U	U	Yes	
Bromochloromet hane	2.5	ug/L	5.0	U	U	Yes	
Chloroform	2.5	ug/L	5.0	U	U	Yes	
1,1,1-Trichloroethane	2.5	ug/L	5.0	U	U	Yes	
Cyclohexane	2.5	ug/L	5.0	U	U	Yes	
Carbon tetrachloride	2.5	ug/L	5.0	U	U	Yes	
Benzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichloroethane	2.5	ug/L	5.0	U	U	Yes	
Trichloroethene	2.5	ug/L	5.0	U	U	Yes	
Methylcyclohexa ne	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichloropropane	2.5	ug/L	5.0	U	U	Yes	
Bromodichlorom ethane	2.5	ug/L	5.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	2.5	ug/L	5.0	U	U	Yes	
4-Methyl-2-pentanone	25	ug/L	5.0	U	U	Yes	
Toluene	2.5	ug/L	5.0	U	U	Yes	
trans-1,3-Dichloropropene	2.5	ug/L	5.0	U	U	Yes	
1,1,2-Trichloroethane	2.5	ug/L	5.0	U	U	Yes	
Tetrachloroethene	64	ug/L	5.0	D		Yes	
2-Hexanone	25	ug/L	5.0	U	U	Yes	
Dibromochloromethane	2.5	ug/L	5.0	U	U	Yes	
1,2-Dibromoethane	2.5	ug/L	5.0	U	U	Yes	
Chlorobenzene	2.5	ug/L	5.0	U	U	Yes	
Ethylbenzene	2.5	ug/L	5.0	U	U	Yes	
o-Xylene	2.5	ug/L	5.0	U	U	Yes	
m,p-Xylene	2.5	ug/L	5.0	U	U	Yes	
Styrene	2.5	ug/L	5.0	U	U	Yes	
Bromoform	2.5	ug/L	5.0	U	U	Yes	
Isopropylbenzene	2.5	ug/L	5.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	2.5	ug/L	5.0	U	U	Yes	
1,3-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,4-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	2.5	ug/L	5.0	U	U	Yes	
1,2,4-Trichlorobenzene	2.5	ug/L	5.0	U	U	Yes	
1,2,3-Trichlorobenzene	2.5	ug/L	5.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LB9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	RW-1	pH:	2.0	Sample Date:	12132011	Sample Time:	11:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC0	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	RW-2	pH:	2.0	Sample Date:	12132011	Sample Time:	15:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.87	ug/L	1.0			Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5LB2	Lab Code: MITKEM
Sample Number: E5LC1	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: RW-3	pH: 2.0	Sample Date: 12142011	Sample Time: 11:15:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5LB2	Lab Code: MITKEM
Sample Number: ESLC2	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: RW-4	pH: 2.0	Sample Date: 12142011	Sample Time: 11:40:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC3	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-9	pH:	2.0	Sample Date:	12152011	Sample Time:	09:15:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	2.8	ug/L	1.0			Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC4	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-3	pH:	2.0	Sample Date:	12132011	Sample Time:	10:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5LB2	Lab Code: MITKEM
Sample Number: E5LC5	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: PW-43	pH: 2.0	Sample Date: 12142011	Sample Time: 10:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.42	ug/L	1.0	J	J	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.73	ug/L	1.0			Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.55	ug/L	1.0			Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.65	ug/L	1.0			Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC6	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-7	pH:	2.0	Sample Date:	12132011	Sample Time:	10:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-42	pH:	2.0	Sample Date:	12132011	Sample Time:	09:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-46	pH:	7.0	Sample Date:	12152011	Sample Time:	09:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.36	ug/L	1.0	J	J	Yes	
1,1,1-Trichloroethane	1.4	ug/L	1.0			Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.87	ug/L	1.0			Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.65	ug/L	1.0			Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LC9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-45	pH:	2.0	Sample Date:	12142011	Sample Time:	10:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.49	ug/L	1.0	J	J	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.25	ug/L	1.0	J	J	Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.54	ug/L	1.0			Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LD0	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-8	pH:	2.0	Sample Date:	12142011	Sample Time:	09:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	1.5	ug/L	1.0			Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LD1	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	PW-44	pH:	2.0	Sample Date:	12132011	Sample Time:	09:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.27	ug/L	1.0	J	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LD2	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	TB-1	pH:	2.0	Sample Date:	12122011	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.2	ug/L	1.0			Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LD3	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	TB-2	pH:	2.0	Sample Date:	12122011	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	6.8	ug/L	1.0			Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	E5LD4	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	TB-3	pH:	7.0	Sample Date:	12122011	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.4	ug/L	1.0			Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: E5LB2	Lab Code: MITKEM
Sample Number: VBLK5B	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 7.0	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.49	ug/L	1.0	J	J	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	VBLK5D	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.70	ug/L	1.0			Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	VBLKU5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No: 42079	Contract: EPW11033	SDG No: B5LB2	Lab Code: MITKEM
Sample Number: VBLKY5	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 7.0	Sample Date:	Sample Time:
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB2	Lab Code:	MITKEM
Sample Number:	VHBLK5D	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 10 Jan 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: OEPA

We have reviewed the data for the following case:

SITE NAME: MULLINS Rubber Products, INC. (OH)

CASE NUMBER: 42079 SDG NUMBER: E5LB2

Number and Type of Samples: 20 water samples

Sample Numbers: E5LB2-B3; B7-B9; C0-C9; D0-D4

Laboratory: Mitkem Hrs for Review: _____

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J



Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number E5LB2

Laboratory Name Mitkem Laboratories Lab Code MITKEM
Contract No. EP-W-11-033 Case No. 42079
Analysis Price \$430 SDG Turnaround 21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) E5LB2	08) E5LC0	15) E5LC7	22) E5LD4
02) E5LB2MS	09) E5LC1	16) E5LC8	
03) E5LB2MSD	10) E5LC2	17) E5LC9	
04) E5LB3	11) E5LC3	18) E5LD0	
05) E5LB7	12) E5LC4	19) E5LD1	
06) E5LB8	13) E5LC5	20) E5LD2	
07) E5LB9	14) E5LC6	21) E5LD3	

First Sample in SDG

E5LB2

Last Sample in SDG

E5LD4

First Sample Receipt Date

12/14/2011

Last Sample Receipt Date

12/16/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature

Agnes R. Kennedy

Date 12/22/2011



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E5LB2

L

Date Shipped: 12/13/2011 Carrier Name: FedEx Airbill: 848838425670 Shipped to: Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400	Chain of Custody Record		Sampler Signature: <i>[Signature]</i>
	Relinquished By	(Date / Time)	Received By
	<i>[Signature]</i>	12/13/11 1630	<i>[Signature]</i> 12/14/11 8:55
	2		
	3		
	4		
For Lab Use Only			
Lab Contract No: EP-W-11-033			
Unit Price: \$430			
Transfer To: —			
Lab Contract No: —			
Unit Price: —			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5L86	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001662 (Ice Only), 5C-001663 (Ice Only), 5C-001664 (Ice Only), 5C-001665 (Ice Only), 5C-001666 (Ice Only), 5C-001667 (Ice Only), 5C-001668 (Ice Only), 5C-001669 (Ice Only), 5C-001670 (Ice Only), 5C-001671 (Ice Only) (10)	SO-1	S: 12/13/2011 12:49		
E5LB2	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121843 (HCL), 5C-121844 (HCL), 5C-121845 (HCL), 5C-121846 (HCL), 5C-121847 (HCL), 5C-121848 (HCL), 5C-121849 (HCL), 5C-121850 (HCL), 5C-121851 (HCL) (9)	Dry Well	S: 12/13/2011 13:00		Good
E5LB3	Ground Water/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001639 (HCL), 5C-001640 (HCL), 5C-001641 (HCL) (3)	GW-1	S: 12/13/2011 11:30		
E5LB9	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001856 (HCL), 5C-001857 (HCL), 5C-001858 (HCL) (3)	RW-1	S: 12/13/2011 11:50		
E5LC0	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001859 (HCL), 5C-001860 (HCL), 5C-001861 (HCL) (3)	RW-2	12/13/11 15:30		Good

Original Documents Are Included in Case
Signed: *[Signature]* Date: 12/14/11
COPY

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: E5L86, E5LB2	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2.0°C	Chain of Custody Seal Number: 29185, 103179
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

351 TR Number: 5-131260284-121311-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: ESLB2

L

Date Shipped: 12/13/2011
Carrier Name: FedEx
Airbill: 848838425670
Shipped to: Mitkem Corporation
175 Metro Center Blvd.
Warwick RI 02886
(401) 732-3400

Chain of Custody Record

Relinquished By

(Date / Time)

Sampler
Signature:

Received By

(Date / Time)

1 *[Signature]*

12/13/11 1630

[Signature]

12/14/11 8:55

2

3

4

For Lab Use Only

Lab Contract No: EP-W-11-033

Unit Price: \$ 430

Transfer To: -

Lab Contract No: -

Unit Price: -

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5LC4	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001871 (HCL), 5C-001872 (HCL), 5C-001873 (HCL) (3)	PW-3	S: 12/13/2011 10:30		Good
E5LC6	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001877 (HCL), 5C-001878 (HCL), 5C-001879 (HCL) (3)	PW-7	S: 12/13/2011 10:00		
E5LC7	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001880 (HCL), 5C-001881 (HCL), 5C-001882 (HCL) (3)	PW-42	S: 12/13/2011 9:30		
E5LD1	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001892 (HCL), 5C-001893 (HCL), 5C-001894 (HCL) (3)	PW-44	S: 12/13/2011 9:00		
E5LD2	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001895 (HCL), 5C-001896 (HCL), 5C-001897 (HCL) (3)	TB-1	S: 12/12/2011 12:00		Good

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E5L86, E5LB2	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2.0°C	Chain of Custody Seal Number: 29185, 103179
Analysis Key: CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TR Number: 5-131260284-121311-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E5LB2

L

Date Shipped: 12/14/2011
Carrier Name: FedEx
Airbill: 848838425680
Shipped to: Mitkem Corporation
175 Metro Center Blvd.
Warwick RI 02886
(401) 732-3400

Chain of Custody Record

Relinquished By (Date / Time)

Sampler Signature:

Received By

(Date / Time)

12/14/11 1700

Daniel Mitkem 12-15-11 9:30

2

3

4

For Lab Use Only

Lab Contract No: EP-W-11-033

Unit Price: \$ 480

Transfer To:

Lab Contract No:

Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5L97	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001619 (Ice Only), 5C-001620 (Ice Only), 5C-001621 (Ice Only), 5C-001622 (Ice Only) (4)	SO-2	S: 12/14/2011 13:50		
E5LB7	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001850 (HCL), 5C-001851 (HCL), 5C-001852 (HCL) (3)	Mullins PW1	S: 12/14/2011 14:30		
E5LB8	Industrial Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001853 (HCL), 5C-001854 (HCL), 5C-001855 (HCL) (3)	Mullins PW2	S: 12/14/2011 14:45		
E5LC1	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001862 (HCL), 5C-001863 (HCL), 5C-001864 (HCL) (3)	RW-3	S: 12/14/2011 11:15		
E5LC2	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001865 (HCL), 5C-001866 (HCL), 5C-001867 (HCL) (3)	RW-4	S: 12/14/2011 11:40		
E5LC5	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001874 (HCL), 5C-001875 (HCL), 5C-001876 (HCL) (3)	PIV-43	S: 12/14/2011 10:30		
E5LC9	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001886 (HCL), 5C-001887 (HCL), 5C-001888 (HCL) (3)	PIV-45	S: 12/14/2011 10:00		
E5LD0	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001889 (HCL), 5C-001890 (HCL), 5C-001891 (HCL) (3)	PW-8	S: 12/14/2011 9:30		
E5LD3	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001898 (HCL), 5C-001899 (HCL), 5C-001900 (HCL) (3)	TB-2	S: 12/12/2011 12:00		

Original Documents Are Included in CSF E5L%
Signed: AA
Date: 12/15/11

COPY

Good

Good

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 8.0 °C	Chain of Custody Seal Number: 29184, 103174
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

TR Number: 5-131260284-121411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program Organic Traffic Report & Chain of Custody Record

Case No:	42079	L
DAS No:		
SDG No:	E 5LB2	
For Lab Use Only		
Lab Contract No:	EP-W-11-033	
Unit Price:	\$430	
Transfer To:	—	
Lab Contract No:	—	
Unit Price:	—	

Date Shipped: 12/15/2011 Carrier Name: FedEx Airbill: 848838425761 Shipped to: Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400	Chain of Custody Record		Sampler Signature: <i>[Signature]</i>
	Relinquished By	(Date / Time)	Received By
	<i>[Signature]</i>	12/15/11	<i>[Signature]</i>
	2		
	3		
4			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5LA5	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001813 (Ice Only), 5C-001814 (Ice Only), 5C-001815 (Ice Only), 5C-001816 (Ice Only) (4)	SO-3	S: 12/15/2011 9:50		
E5LA6	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001817 (Ice Only), 5C-001818 (Ice Only), 5C-001819 (Ice Only), 5C-001820 (Ice Only) (4)	SO-4	S: 12/15/2011 11:20		
E5LA7	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001821 (Ice Only), 5C-001822 (Ice Only), 5C-001823 (Ice Only), 5C-001824 (Ice Only) (4)	SO-5	S: 12/15/2011 13:00		
E5LA8	Soil/Sediment/ Wendy Vorwerk	L/G	VOA Encore (21)	5C-001825 (Ice Only), 5C-001826 (Ice Only), 5C-001827 (Ice Only), 5C-001828 (Ice Only) (4)	SO-6	S: 12/15/2011 13:45		
E5LC3	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001868 (HCL), 5C-001869 (HCL), 5C-001870 (HCL) (3)	PW-9	S: 12/15/2011 9:15		Good
E5LC8	Potable Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001883 (HCL), 5C-001884 (HCL), 5C-001885 (HCL) (3)	PW-46	S: 12/15/2011 9:45		Good
E5LD4	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-101998 (HCL), 5C-101999 (HCL), 5C-102000 (HCL) (3)	TB-3	S: 12/12/2011 12:00		Good

SDG- Final Sample

COPY
Original Documents Are Included in CSF E5LB6
Signed: AQA Date: 12/16/11

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: <i>8.0</i>	Chain of Custody Seal Number: <i>29192 - 29193</i>
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles, VOA Encore = CLP VOA Encore				

TR Number: **5-131260284-121511-0001**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

SDG Narrative

Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division submits the enclosed data package in response to USEPA Case # 42079 and SDG# E5LB2. Analyses were performed for twenty aqueous samples that were received on December 14 to December 16, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that the sample-shipping cooler received on December 14 was measured at 2.0°C. The temperature of the cooler received on December 15 was measured at 4.0°C. The temperature of the cooler received on December 16 was measured at 8.0°C.

The following samples are submitted in this data package:

<u>Client ID</u>	<u>Lab ID</u>	<u>Analysis</u>	<u>VOA pH</u>
E5LB2	K2629-01A	TV	< 2
E5LB2DL	K2629-01ADL	TV	< 2
E5LB2MS	K2629-01AMS	TV	< 2
E5LB2MSD	K2629-01AMSD	TV	< 2
E5LB3	K2629-02A	TV	< 2
E5LB9	K2629-03A	TV	< 2
E5LC0	K2629-04A	TV	< 2
E5LC4	K2629-05A	TV	< 2
E5LC6	K2629-06A	TV	< 2
E5LC7	K2629-07A	TV	< 2
E5LD1	K2629-08A	TV	< 2
E5LD2	K2629-09A	TV	< 2
E5LB7	K2629-10A	TV	< 2
E5LB7DL	K2629-10ADL	TV	< 2
E5LB8	K2629-11A	TV	< 2
E5LB8DL	K2629-11ADL	TV	< 2
E5LC1	K2629-12A	TV	< 2
E5LC2	K2629-13A	TV	< 2
E5LC5	K2629-14A	TV	< 2
E5LC9	K2629-15A	TV	< 2
E5LD0	K2629-16A	TV	< 2
E5LD3	K2629-17A	TV	< 2
E5LC3	K2629-18A	TV	< 2
E5LC8	K2629-19A	TV	< 2
E5LD4	K2629-20A	TV	< 2

TV = Trace Volatiles

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration

(SOM01.2) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

SAMPLE RECEIPT:

No exceptions or unusual conditions were encountered.

Trace Volatile Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP
SOM 1.2 VOC TRACE

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu\text{g/L}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(25)}{V_o}$$

where: Amt = on-column amount on raw data

DF = Dilution factor

UF = ng unit correction factor

V_o = Sample volume purged (mL)

The following equation was used to calculate the Amt in the previous equation:

$$\text{Amt} = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured

A_{is} = area of the characteristic ion for the associated internal standard

IS = concentration of internal standard in ug/L

RRF = relative response factor

III. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

IV. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: V5

Instrument Type: GCMS-VOA

Description: HP6890 / HP6890

Manufacturer: Hewlett-Packard

Model: 6890 / 6890

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

Secondary ion 65 was used in the quantitation of 1,1-dichloroethene-d2 instead of primary ion 63 due to the interference with target compound 1,1-dichloroethene in the calibration standards.

B. Blanks:

Blanks met the method/SOP acceptance criteria.

C. DMC Recoveries:

DMC recoveries were within the QC limits.

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample E5LB2.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were re-analyzed at dilution:

E5LB2: Dilution Factor: 8

E5LB7: Dilution Factor: 5

E5LB8: Dilution Factor: 5

G. Samples:

cis-1,3-Dichloropropene-d4 was detected in method blanks and in samples. The volatile organic deuterated monitoring compound spike solution contains both the cis- and trans-1,3-dichloropropene isomers. cis-1,3-Dichloropropene-d4 is not a deuterated monitoring compound for SOM01.2, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

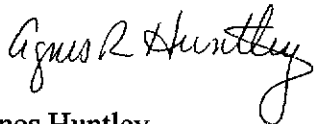
No other unusual observations were made for the analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.



Agnes Huntley
CLP Project Manager
01/03/12

2A - FORM II VOA-1

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract:

EP-W-11-033

Lab Code: MITKEM

Case No.: 42079

Mod. Ref No.:

SDG No.: E5LB2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKU5	99	99	99	93	96	94	91
02	E5LD2	88	96	95	88	94	92	91
03	E5LB2	87	94	92	91	95	96	90
04	E5LB2MS	86	91	90	89	96	92	88
05	E5LB2MSD	88	92	95	90	96	88	92
06	E5LB3	90	96	94	94	98	98	93
07	E5LB9	80	92	92	92	94	91	90
08	E5LC0	81	94	96	91	97	92	90
09	E5LC4	84	90	90	93	95	94	91
10	E5LC6	84	92	90	90	95	91	90
11	E5LC7	84	90	91	93	97	95	92
12	E5LD1	83	91	88	91	95	92	91
13	VBLKY5	99	104	101	89	97	89	93
14	E5LB2DL	91	91	98	91	94	94	92
15	VBLK5B	105	107	98	106	97	99	87
16	E5LB7	97	100	90	104	99	102	90
17	E5LB8	93	100	89	102	98	103	88
18	E5LC1	88	99	89	101	95	102	89
19	E5LC2	94	99	91	101	99	106	87
20	E5LC5	93	99	92	102	98	103	88
21	E5LC9	93	96	92	103	98	104	88
22	E5LD0	94	100	91	105	100	106	89
23	E5LD3	94	99	89	100	97	100	91
24	E5LC3	93	98	87	103	98	106	89
25	VBLK5D	105	103	91	98	95	100	90
26	E5LC8	93	97	90	99	99	101	90

QC LIMITS

VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLKU5	85	93	81	86	84	86		0
02	E5LD2	85	95	82	85	90	88		0
03	E5LB2	82	91	80	82	87	85		0
04	E5LB2MS	81	91	81	84	86	86		0
05	E5LB2MSD	84	94	83	87	92	86		0
06	E5LB3	83	93	76	86	92	92		0
07	E5LB9	82	91	79	86	89	88		0
08	E5LC0	81	88	79	84	86	85		0
09	E5LC4	84	94	83	86	90	87		0
10	E5LC6	83	92	81	87	90	91		0
11	E5LC7	83	93	82	85	92	85		0
12	E5LD1	81	91	80	81	91	87		0
13	VBLKY5	84	94	83	84	85	84		0
14	E5LB2DL	81	93	90	82	87	86		0
15	VBLK5B	84	91	91	94	94	89		0
16	E5LB7	81	92	86	93	92	90		0
17	E5LB8	81	91	90	90	97	90		0
18	E5LC1	83	92	86	91	94	98		0
19	E5LC2	80	90	84	90	94	95		0
20	E5LC5	81	90	85	87	90	90		0
21	E5LC9	83	90	90	88	91	90		0
22	E5LD0	85	89	90	91	94	88		0
23	E5LD3	83	91	86	90	88	94		0
24	E5LC3	84	90	87	90	91	91		0
25	VBLK5D	88	94	90	90	92	93		0
26	E5LC8	82	93	87	86	89	95		0

VDMC8	(DPA) = 1,2-Dichloropropane-d6	QC LIMITS (79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
27	E5LD4	96	98	88	98	96	102	88
28	E5LB7DL	104	105	97	93	95	99	88
29	E5LB8DL	93	93	96	97	98	101	87
30	VHBLK5D	97	97	95	98	94	95	92

VDMC1 (VCL) = Vinyl chloride-d3
 VDMC2 (CLA) = Chloroethane-d5
 VDMC3 (DCE) = 1,1-Dichloroethene-d2
 VDMC4 (BUT) = 2-Butanone-d5
 VDMC5 (CLF) = Chloroform-d
 VDMC6 (DCA) = 1,2-Dichloroethane-d4
 VDMC7 (BEN) = Benzene-d6

QC LIMITS

(65-131)
 (71-131)
 (55-104)
 (49-155)
 (78-121)
 (78-129)
 (77-124)

Column to be used to flag recovery values
 * Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
27	E5LD4	81	90	85	88	90	90		0
28	E5LB7DL	81	91	91	84	92	85		0
29	E5LB8DL	81	90	92	90	91	87		0
30	VHBLK5D	84	93	95	98	98	87		0

		QC LIMITS
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix Spike - EPA Sample No.: E5LB2 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	5.0000	0.0000	4.8009	96		61-145
Benzene	5.0000	0.0000	4.8303	97		76-127
Trichloroethene	5.0000	1.4204	6.2050	96		71-120
Toluene	5.0000	0.0000	4.7365	95		76-125
Chlorobenzene	5.0000	0.0000	4.9872	100		75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	QC LIMITS	
						RPD	REC.
1,1-Dichloroethene	5.0000	4.4913	90		7	0-14	61-145
Benzene	5.0000	4.8024	96		1	0-11	76-127
Trichloroethene	5.0000	6.1877	95		0	0-14	71-120
Toluene	5.0000	4.6481	93		2	0-13	76-125
Chlorobenzene	5.0000	4.9285	99		1	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKU5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Lab File ID: V5N3845.D Lab Sample ID: MB-63742
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/15/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 20:34
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LD2	K2629-09A	V5N3850.D	22:59
02	E5LB2	K2629-01A	V5N3851.D	23:28
03	E5LB2MS	K2629-01AMS	V5N3852.D	23:57
04	E5LB2MSD	K2629-01AMSD	V5N3853.D	0:26
05	E5LB3	K2629-02A	V5N3854.D	0:55
06	E5LB9	K2629-03A	V5N3855.D	1:23
07	E5LC0	K2629-04A	V5N3856.D	1:52
08	E5LC4	K2629-05A	V5N3857.D	2:18
09	E5LC6	K2629-06A	V5N3858.D	2:47
10	E5LC7	K2629-07A	V5N3859.D	3:16
11	E5LD1	K2629-08A	V5N3860.D	3:45

COMMENTS:

EPA SAMPLE NO.

VBULKY5

Lab Name:	MITKEM LABORATORIES			Contract:	EP-W-11-033
Lab Code:	MITKEM	Case No.:	42079	Mod. Ref No.:	SDG No.: E5LB2
Lab File ID:	V5N3922.D			Lab Sample ID:	MB-63792
Instrument ID:	V5				
Matrix: (SOIL/SED/WATER)	WATER			Date Analyzed:	12/19/2011
Level: (TRACE or LOW/MED)	TRACE			Time Analyzed:	9:28
GC Column:	DB-624	ID:	0.25 (mm)	Heated Purge: (Y/N)	N

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01E5LB2DL	K2629-01ADL	V5N3931.D	13:47

COMMENTS :

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Lab File ID: V5N3992.D Lab Sample ID: MB-63836
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/20/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 20:01
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LB7	K2629-10A	V5N4005.D	2:13
02	E5LB8	K2629-11A	V5N4006.D	2:42
03	E5LC1	K2629-12A	V5N4007.D	3:11
04	E5LC2	K2629-13A	V5N4008.D	3:39
05	E5LC5	K2629-14A	V5N4009.D	4:08
06	E5LC9	K2629-15A	V5N4010.D	4:37
07	E5LD0	K2629-16A	V5N4011.D	5:05
08	E5LD3	K2629-17A	V5N4012.D	5:34
09	E5LC3	K2629-18A	V5N4013.D	6:03

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Lab File ID: V5N4016.D Lab Sample ID: MB-63837
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/21/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 7:30
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LC8	K2629-19A	V5N4017.D	7:59
02	E5LD4	K2629-20A	V5N4018.D	8:27
03	E5LB7DL	K2629-10ADL	V5N4024.D	11:21
04	E5LB8DL	K2629-11ADL	V5N4025.D	11:50
05	VHBLK5D	VHBLK5D	V5N4037.D	17:35

COMMENTS:

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD#####): VSTD005U5 Date Analyzed: 12/15/2011
 Lab File ID (Standard): V5N3844.D Time Analyzed: 20:09
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	811686	9.431	1130711	6.319	355414	12.172
UPPER LIMIT	1136360	9.761	1582995	6.649	497580	12.502
LOWER LIMIT	487012	9.101	678427	5.989	213248	11.842
EPA SAMPLE NO.						
01 VBLKU5	815550	9.431	1080772	6.319	329868	12.184
02 E5LD2	766897	9.432	1053408	6.320	318029	12.184
03 E5LB2	800650	9.432	1043213	6.320	321248	12.185
04 E5LB2MS	791312	9.429	1041604	6.317	318187	12.182
05 E5LB2MSD	758307	9.425	1023430	6.325	310849	12.178
06 E5LB3	778953	9.426	1034313	6.325	298428	12.178
07 E5LB9	781653	9.431	1027216	6.318	309755	12.183
08 E5LC0	798188	9.431	1043155	6.330	317931	12.183
09 E5LC4	785448	9.432	1055864	6.319	324062	12.184
10 E5LC6	762223	9.429	1023111	6.328	292672	12.181
11 E5LC7	765869	9.437	1024701	6.325	313720	12.178
12 E5LD1	787797	9.431	1055271	6.331	319861	12.184

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD#####): VSTD005Y5 Date Analyzed: 12/19/2011
 Lab File ID (Standard): V5N3921.D Time Analyzed: 9:05
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	700887	9.43	955712	6.318	317053	12.171
UPPER LIMIT	981242	9.76	1337997	6.648	443874	12.501
LOWER LIMIT	420532	9.1	573427	5.988	190232	11.841
EPA SAMPLE NO.						
01 VBLKY5	760366	9.432	1029347	6.320	296457	12.184
02 E5LB2DL	661249	9.428	893271	6.328	275152	12.181

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No.(VSTD#####): VSTD0055B Date Analyzed: 12/20/2011
 Lab File ID (Standard): V5N3991.D Time Analyzed: 19:32
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	623268	9.425	826308	6.324	282873	12.166
UPPER LIMIT	872575	9.755	1156831	6.654	396022	12.496
LOWER LIMIT	373961	9.095	495785	5.994	169724	11.836
EPA SAMPLE NO.						
01 VBLK5B	670192	9.432	882227	6.319	270822	12.184
02 E5LB7	621236	9.426	801555	6.325	249941	12.178
03 E5LB8	622340	9.426	794657	6.325	246006	12.178
04 E5LC1	624636	9.431	817572	6.318	237964	12.183
05 E5LC2	631654	9.432	795815	6.320	232472	12.185
06 E5LC5	622509	9.431	801722	6.319	246494	12.183
07 E5LC9	633854	9.430	808821	6.329	252620	12.182
08 E5LD0	623312	9.427	788145	6.326	254337	12.179
09 E5LD3	635126	9.437	829051	6.324	248249	12.189
10 E5LC3	627757	9.428	806499	6.327	248796	12.180

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD#####): VSTD0055D Date Analyzed: 12/21/2011
 Lab File ID (Standard): V5N4015.D Time Analyzed: 7:01
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	602237	9.426	791568	6.326	271171	12.167
UPPER LIMIT	843132	9.756	1108195	6.656	379639	12.497
LOWER LIMIT	361342	9.096	474941	5.996	162703	11.837
EPA SAMPLE NO.						
01 VBLK5D	606141	9.432	822594	6.320	244999	12.185
02 E5LC8	644938	9.426	847065	6.326	240538	12.179
03 E5LD4	637679	9.427	822422	6.326	251026	12.179
04 E5LB7DL	542165	9.427	709342	6.326	234946	12.179
05 E5LB8DL	532561	9.430	684582	6.330	227479	12.183
06 VHBLK5D	627402	9.438	855552	6.326	264955	12.191

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3851.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3851.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ g/L	Q
79-01-6	Trichloroethene	1.4	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	56	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3851.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/15/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3931.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/19/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		4.0	U
74-87-3	Chloromethane		4.0	U
75-01-4	Vinyl chloride		4.0	U
74-83-9	Bromomethane		4.0	U
75-00-3	Chloroethane		4.0	U
75-69-4	Trichlorofluoromethane		4.0	U
75-35-4	1,1-Dichloroethene		4.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		4.0	U
67-64-1	Acetone		40	U
75-15-0	Carbon disulfide		4.0	U
79-20-9	Methyl acetate		4.0	U
75-09-2	Methylene chloride		4.0	U
156-60-5	trans-1,2-Dichloroethene		4.0	U
1634-04-4	Methyl tert-butyl ether		4.0	U
75-34-3	1,1-Dichloroethane		4.0	U
156-59-2	cis-1,2-Dichloroethene		4.0	U
78-93-3	2-Butanone		40	U
74-97-5	Bromochloromethane		4.0	U
67-66-3	Chloroform		4.0	U
71-55-6	1,1,1-Trichloroethane		4.0	U
110-82-7	Cyclohexane		4.0	U
56-23-5	Carbon tetrachloride		4.0	U
71-43-2	Benzene		4.0	U
107-06-2	1,2-Dichloroethane		4.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3931.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/19/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	4.0	U
108-87-2	Methylcyclohexane	4.0	U
78-87-5	1,2-Dichloropropane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
127-18-4	Tetrachloroethene	76	D
591-78-6	2-Hexanone	40	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
179601-23-1	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
87-61-6	1,2,3-Trichlorobenzene	4.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01ADL
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3931.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011
 % Moisture: not dec. Date Analyzed: 12/19/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01AMS
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3852.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		4.8	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		4.8	
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01AMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3852.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/15/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	µG/L	Q
79-01-6	Trichloroethene		6.2	
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		4.7	
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		57	E
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		5.0	
100-41-4	Ethylbenzene		0.50	U
179601-23-1	m,p-Xylene		0.50	U
95-47-6	o-Xylene		0.50	U
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB2MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01AMSD
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3853.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	4.5	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	4.8	
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5LB2MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-01AMSD
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3853.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	6.2	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.6	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	62	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	4.9	
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-02A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3854.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-02A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3854.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.20	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3854.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4005.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4005.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.47	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	52	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4005.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB7DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4024.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	2.5	U
74-87-3	Chloromethane	2.5	U
75-01-4	Vinyl chloride	2.5	U
74-83-9	Bromomethane	2.5	U
75-00-3	Chloroethane	2.5	U
75-69-4	Trichlorofluoromethane	2.5	U
75-35-4	1,1-Dichloroethene	2.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U
67-64-1	Acetone	25	U
75-15-0	Carbon disulfide	2.5	U
79-20-9	Methyl acetate	2.5	U
75-09-2	Methylene chloride	2.5	U
156-60-5	trans-1,2-Dichloroethene	2.5	U
1634-04-4	Methyl tert-butyl ether	2.5	U
75-34-3	1,1-Dichloroethane	2.5	U
156-59-2	cis-1,2-Dichloroethene	2.5	U
78-93-3	2-Butanone	25	U
74-97-5	Bromochloromethane	2.5	U
67-66-3	Chloroform	2.5	U
71-55-6	1,1,1-Trichloroethane	2.5	U
110-82-7	Cyclohexane	2.5	U
56-23-5	Carbon tetrachloride	2.5	U
71-43-2	Benzene	2.5	U
107-06-2	1,2-Dichloroethane	2.5	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5LB7DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4024.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) pG/L	Q
79-01-6	Trichloroethene	2.5	U
108-87-2	Methylcyclohexane	2.5	U
78-87-5	1,2-Dichloropropane	2.5	U
75-27-4	Bromodichloromethane	2.5	U
10061-01-5	cis-1,3-Dichloropropene	2.5	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	2.5	U
10061-02-6	trans-1,3-Dichloropropene	2.5	U
79-00-5	1,1,2-Trichloroethane	2.5	U
127-18-4	Tetrachloroethene	61	D
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	2.5	U
106-93-4	1,2-Dibromoethane	2.5	U
108-90-7	Chlorobenzene	2.5	U
100-41-4	Ethylbenzene	2.5	U
179601-23-1	m,p-Xylene	2.5	U
95-47-6	o-Xylene	2.5	U
100-42-5	Styrene	2.5	U
75-25-2	Bromoform	2.5	U
98-82-8	Isopropylbenzene	2.5	U
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U
541-73-1	1,3-Dichlorobenzene	2.5	U
106-46-7	1,4-Dichlorobenzene	2.5	U
95-50-1	1,2-Dichlorobenzene	2.5	U
96-12-8	1,2-Dibromo-3-chloropropane	2.5	U
120-82-1	1,2,4-Trichlorobenzene	2.5	U
87-61-6	1,2,3-Trichlorobenzene	2.5	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB7DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-10ADL
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4024.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
 % Moisture: not dec. Date Analyzed: 12/21/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4006.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4006.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.51	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	54	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4006.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4025.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	2.5	U
74-87-3	Chloromethane	2.5	U
75-01-4	Vinyl chloride	2.5	U
74-83-9	Bromomethane	2.5	U
75-00-3	Chloroethane	2.5	U
75-69-4	Trichlorofluoromethane	2.5	U
75-35-4	1,1-Dichloroethene	2.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U
67-64-1	Acetone	25	U
75-15-0	Carbon disulfide	2.5	U
79-20-9	Methyl acetate	2.5	U
75-09-2	Methylene chloride	2.5	U
156-60-5	trans-1,2-Dichloroethene	2.5	U
1634-04-4	Methyl tert-butyl ether	2.5	U
75-34-3	1,1-Dichloroethane	2.5	U
156-59-2	cis-1,2-Dichloroethene	2.5	U
78-93-3	2-Butanone	25	U
74-97-5	Bromochloromethane	2.5	U
67-66-3	Chloroform	2.5	U
71-55-6	1,1,1-Trichloroethane	2.5	U
110-82-7	Cyclohexane	2.5	U
56-23-5	Carbon tetrachloride	2.5	U
71-43-2	Benzene	2.5	U
107-06-2	1,2-Dichloroethane	2.5	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E51B8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E51B2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4025.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/L	Q
79-01-6	Trichloroethene		2.5	U
108-87-2	Methylcyclohexane		2.5	U
78-87-5	1,2-Dichloropropane		2.5	U
75-27-4	Bromodichloromethane		2.5	U
10061-01-5	cis-1,3-Dichloropropene		2.5	U
108-10-1	4-Methyl-2-pentanone		25	U
108-88-3	Toluene		2.5	U
10061-02-6	trans-1,3-Dichloropropene		2.5	U
79-00-5	1,1,2-Trichloroethane		2.5	U
127-18-4	Tetrachloroethene		64	D
591-78-6	2-Hexanone		25	U
124-48-1	Dibromochloromethane		2.5	U
106-93-4	1,2-Dibromoethane		2.5	U
108-90-7	Chlorobenzene		2.5	U
100-41-4	Ethylbenzene		2.5	U
179601-23-1	m,p-Xylene		2.5	U
95-47-6	o-Xylene		2.5	U
100-42-5	Styrene		2.5	U
75-25-2	Bromoform		2.5	U
98-82-8	Isopropylbenzene		2.5	U
79-34-5	1,1,2,2-Tetrachloroethane		2.5	U
541-73-1	1,3-Dichlorobenzene		2.5	U
106-46-7	1,4-Dichlorobenzene		2.5	U
95-50-1	1,2-Dichlorobenzene		2.5	U
96-12-8	1,2-Dibromo-3-chloropropane		2.5	U
120-82-1	1,2,4-Trichlorobenzene		2.5	U
87-61-6	1,2,3-Trichlorobenzene		2.5	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-11ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4025.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-03A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3855.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-03A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3855.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-03A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3855.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011
 % Moisture: not dec. Date Analyzed: 12/16/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-04A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3856.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.87	
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3856.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-04A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3856.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-12A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4007.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-12A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4007.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-12A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4007.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
 % Moisture: not dec. Date Analyzed: 12/21/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-13A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4008.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-13A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4008.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-13A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4008.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-18A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4013.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-18A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4013.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	2.8	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4013.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/16/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-05A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3857.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-05A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3857.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ g/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-05A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3857.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-14A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4009.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.42	J
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.73	
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5LC5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-14A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4009.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.55	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.65	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-14A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4009.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
 % Moisture: not dec. Date Analyzed: 12/21/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5LC6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-06A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3858.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
75-71-8	Dichlorodifluoromethane	0.50	U	
74-87-3	Chloromethane	0.50	U	
75-01-4	Vinyl chloride	0.50	U	
74-83-9	Bromomethane	0.50	U	
75-00-3	Chloroethane	0.50	U	
75-69-4	Trichlorofluoromethane	0.50	U	
75-35-4	1,1-Dichloroethene	0.50	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	0.50	U	
79-20-9	Methyl acetate	0.50	U	
75-09-2	Methylene chloride	0.50	U	
156-60-5	trans-1,2-Dichloroethene	0.50	U	
1634-04-4	Methyl tert-butyl ether	0.50	U	
75-34-3	1,1-Dichloroethane	0.50	U	
156-59-2	cis-1,2-Dichloroethene	0.50	U	
78-93-3	2-Butanone	5.0	U	
74-97-5	Bromochloromethane	0.50	U	
67-66-3	Chloroform	0.50	U	
71-55-6	1,1,1-Trichloroethane	0.50	U	
110-82-7	Cyclohexane	0.50	U	
56-23-5	Carbon tetrachloride	0.50	U	
71-43-2	Benzene	0.50	U	
107-06-2	1,2-Dichloroethane	0.50	U	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-06A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3858.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3858.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-07A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3859.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-07A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3859.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	µG/L
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-07A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3859.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-19A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4017.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.36	J
71-55-6	1,1,1-Trichloroethane	1.4	
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4017.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
79-01-6	Trichloroethene	0.87	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.65	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4017.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/16/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-15A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4010.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µg/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.49	J
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LC9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-15A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4010.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
79-01-6	Trichloroethene		0.25	J
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.50	U
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		0.54	
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		0.50	U
100-41-4	Ethylbenzene		0.50	U
179601-23-1	m,p-Xylene		0.50	U
95-47-6	o-Xylene		0.50	U
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LC9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-15A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4010.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-16A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4011.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4011.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
79-01-6	Trichloroethene		0.50	U
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.50	U
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		1.5	
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		0.50	U
100-41-4	Ethylbenzene		0.50	U
179601-23-1	m,p-Xylene		0.50	U
95-47-6	o-Xylene		0.50	U
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4011.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-08A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3860.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-08A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3860.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/16/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.27	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3860.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-09A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3850.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.2	
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-09A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3850.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/14/2011
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3850.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/14/2011

% Moisture: not dec. Date Analyzed: 12/15/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679611	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4012.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		6.8	
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-17A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4012.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-17A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4012.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/15/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µg/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-20A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4018.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ g/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.4	
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4018.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/16/2011

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2629-20A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4018.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/16/2011
 % Moisture: not dec. Date Analyzed: 12/21/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63836
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3992.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/20/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.49	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63836
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3992.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/20/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63836
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3992.D
Level: (TRACE or LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/20/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63837
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4016.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.70	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63837

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4016.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 12/21/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ g/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63837
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4016.D
 Level: (TRACE or LOW/MED) TRACE Date Received:
 % Moisture: not dec. Date Analyzed: 12/21/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKU5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63742
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3845.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µg/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKU5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63742
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3845.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/15/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKU5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63742

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3845.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 12/15/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKY5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63792
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3922.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/19/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	µG/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKY5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63792
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3922.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/19/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
79-01-6	Trichloroethene		0.50	U
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.50	U
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		0.50	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		0.50	U
100-41-4	Ethylbenzene		0.50	U
179601-23-1	m,p-Xylene		0.50	U
95-47-6	o-Xylene		0.50	U
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKY5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63792
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N3922.D
Level: (TRACE or LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/19/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E51B2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5D
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4037.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5D
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4037.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
79-01-6	Trichloroethene		0.50	U
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.50	U
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		0.50	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		0.50	U
100-41-4	Ethylbenzene		0.50	U
179601-23-1	m,p-Xylene		0.50	U
95-47-6	o-Xylene		0.50	U
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5D

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB2
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5D
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4037.D
Level: (TRACE or LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/21/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ~ REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E5LB2 CERCLIS No: 04N000510489
Case No: 42079 Site Name/Location: MULLINS Rubber Products (OH)
Contractor or EPA Lab: Mitkem Data User: OEPA
No. of Samples: 20 Date Sampled or Date Received: 10 Jan 2012

Have Chain-of-Custody records been received? Yes ☒ No ☐
Have traffic reports or packing lists been received? Yes ☒ No ☐
If no, are traffic reports or packing list numbers written on the Chain-of-Custody Record?
Yes ☐ No ☐
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ☒ No ☐
No of samples claimed: 20 No. of samples received: _____

Received by: P. A. Joeger Date: 10 Jan 2012

Received by LSSS: P. A. Joeger Date: 12 Jan 2012

Review started: 2-1-12 Reviewer Signature: Deborah Court

Total time spent on review: 10.5 Date review completed: 2-2-12

Copied by: A. C. Harvey Date: Feb 6, 2012

Mailed to user by: P. A. Joeger Date: 8 FEB 2012

DATA USER:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
Organic Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
Dioxin data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK
SAS Data Complete	<input type="checkbox"/> Suitable for Intended Purpose <input type="checkbox"/> T if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: _____

ESAT5.316.00168

ACH

2-14-12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE:

SUBJECT: Review of Data
Received for Review on: 13 January 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: OEPA
Email Address: wendy.vorwerk@epa.state.oh.us

Level 3 Data Validation

We have reviewed the data for the following case:

SITE Name: Mullins Rubber Products (OH)

Case Number: 42079 SDG Number: E5LB4

Number and Type of Samples: 7 Water Samples (Trace VOA)

Sample Numbers: E5LB4, E5LB5, E5LD5, E5LD7- E5LD9, E5LE1

Laboratory: Mitkem Laboratories Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 2 of 6
SDG Number: E5LB4
Laboratory: Mitkem Laboratories

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seven (7) preserved water samples labeled E5LB4, E5LB5, E5LD5, E5LD7- E5LD9, and E5LE1, were shipped to Mitkem Laboratories located in Warwick, RI. All samples were collected on 12/12/11 and 12/19/11 and received on 12/21/11 intact. All samples were received by the laboratory at temperatures above the $4 \pm 2^{\circ}\text{C}$ temperature QC Limit. Sample results are not qualified for this discrepancy.

All samples were analyzed for the Trace VOA list of compounds. All samples were analyzed according to CLP SOW SOM01.2 (6/2007) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.6).

No samples were designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses. The laboratory selected sample E5LB4 for the MS/MSD analyses.

Sample E5LD5 was identified as a trip blank. No samples were identified as field duplicates.

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 3 of 6
SDG Number: E5LB4
Laboratory: Mitkem Laboratories

1. HOLDING TIME

The following preserved trace volatile water samples are outside the primary analytical holding time criteria (14 days). Detected compounds are qualified "J". Non-detected compounds are qualified "R".

E5LD5

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No Problems Found.

3. CALIBRATION

No Problems Found.

4. BLANKS

The following trace volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated trip blank has common contaminant analyte concentration less than 2x the concentration criteria. Reported sample concentrations have been elevated to 2x the CRQL and qualified "U".

E5LD7
Acetone

The following trace volatile samples were analyzed after a sample with compounds exceeding calibration and no intervening instrument blank. Detection of these compounds should be qualified "J" as they may be a result of carryover.

E5LD9, E5LE1
Tetrachloroethene

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following trace volatile samples have one or more DMC/SMC recovery values less than the primary lower limit but greater than or equal to the expanded lower limit (20%) of the criteria window. The compounds were not detected in the samples. Non-detected compounds are qualified "UJ". Sample E5LD5 is ultimately qualified "R" due to holding time.

E5LB4, E5LB5, E5LD5, E5LD7, E5LD8, E5LD9, E5LE1
cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane

Case Number: 42079

SDG Number: E5LB4

Site Name: Mullins Rubber Products (OH)

Laboratory: Mitkem Laboratories

The following trace volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. The compounds were not detected in the samples. Non-detected compounds are not qualified.

E5LD8DL, E5LD9DL

1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethene

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No samples were designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses. The laboratory selected sample E5LB4 for the MS/MSD analyses.

No Problems Found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to Trace VOA analyses.

7. FIELD BLANK AND FIELD DUPLICATE

One (1) sample; E5LD5 was identified as a trip blank. Results are summarized in the following table:

Volatile analytes:	µg/L
Acetone	7.6

8. INTERNAL STANDARDS

No Problems Found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SV, Pesticide and aroclor compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following trace volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E5LB4, E5LD8, E5LE1

Trichloroethene

E5LD7

Carbon disulfide, Methyl tert-butyl ether, Toluene, Tetrachloroethene

Reviewed by: Michele Traina / Techlaw-ESAT

Date: 02/09/12

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 5 of 6
SDG Number: E5LB4
Laboratory: Mitkem Laboratories

VBLK5U
Tetrachloroethene

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

The following trace volatile samples have reported concentrations that exceeded the instrument's linear calibration range. These results were flagged "E" by the laboratory and are estimated "J". The results from the diluted samples should be used for result validation.

E5LD8, E5LD9, E5LE1
Tetrachloroethene

Case Number: 42079
Site Name: Mullins Rubber Products (OH)

Page 6 of 6
SDG Number: E5LB4
Laboratory: Mitkem Laboratories

CADRE Data Qualifier Sheet

Qualifiers

Data Qualifier Definitions

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Sample Summary Report

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LB4	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	GW-2	pH:	2.0	Sample Date:	12192011	Sample Time:	15:20:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.47	ug/L	1.0	J	J	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	9.5	ug/L	1.0	B		Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LB4MS	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	GW-2	pH:	2.0	Sample Date:	12192011	Sample Time:	15:20:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	5.2	ug/L	1.0			Yes	
Benzene	4.9	ug/L	1.0			Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	4.9	ug/L	1.0			Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Toluene	4.8	ug/L	1.0			Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	5.0	ug/L	1.0			Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	11	ug/L	1.0	B		Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,1,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LB4MSD	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	GW-2	pH:	2.0	Sample Date:	12192011	Sample Time:	15:20:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	4.8	ug/L	1.0			Yes	
Benzene	4.5	ug/L	1.0			Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	4.9	ug/L	1.0			Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Toluene	4.5	ug/L	1.0			Yes	
Chlorobenzene	4.8	ug/L	1.0			Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	10	ug/L	1.0	B		Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LB5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	GW-3	pH:	2.0	Sample Date:	12192011	Sample Time:	16:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	TB-4	pH:	2.0	Sample Date:	12122011	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	R	Yes	
Chloromethane	0.50	ug/L	1.0	U	R	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	R	Yes	
Bromomethane	0.50	ug/L	1.0	U	R	Yes	
Chloroethane	0.50	ug/L	1.0	U	R	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	R	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	R	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	R	Yes	
Acetone	7.6	ug/L	1.0		J	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	R	Yes	
Methyl acetate	0.50	ug/L	1.0	U	R	Yes	
Methylene chloride	0.50	ug/L	1.0	U	R	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	R	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	R	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	R	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	R	Yes	
2-Butanone	5.0	ug/L	1.0	U	R	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	R	Yes	
Chloroform	0.50	ug/L	1.0	U	R	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	R	Yes	
Cyclohexane	0.50	ug/L	1.0	U	R	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	R	Yes	
Benzene	0.50	ug/L	1.0	U	R	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	Yes	
Trichloroethene	0.50	ug/L	1.0	U	R	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	R	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	R	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	R	Yes	
Toluene	0.50	ug/L	1.0	U	R	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	R	Yes	
2-Hexanone	5.0	ug/L	1.0	U	R	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	R	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	R	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	R	Yes	
o-Xylene	0.50	ug/L	1.0	U	R	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	R	Yes	
Styrene	0.50	ug/L	1.0	U	R	Yes	
Bromoform	0.50	ug/L	1.0	U	R	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	R	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	R	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	R	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	R	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	R	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-1	pH:	2.0	Sample Date:	12192011	Sample Time:	14:20:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	10	ug/L	1.0	J	U	Yes	
Carbon disulfide	0.29	ug/L	1.0	J	J	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.46	ug/L	1.0	J	J	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.25	ug/L	1.0	J	J	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	0.35	ug/L	1.0	J	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-2	pH:	2.0	Sample Date:	12192011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.28	ug/L	1.0	J	J	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	23	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD8DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-2	pH:	2.0	Sample Date:	12192011	Sample Time:	13:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	1.0	ug/L	2.0	U	U	Yes	
Chloromethane	1.0	ug/L	2.0	U	U	Yes	
Vinyl chloride	1.0	ug/L	2.0	U	U	Yes	
Bromomethane	1.0	ug/L	2.0	U	U	Yes	
Chloroethane	1.0	ug/L	2.0	U	U	Yes	
Trichlorofluoromethane	1.0	ug/L	2.0	U	U	Yes	
1,1-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	ug/L	2.0	U	U	Yes	
Acetone	10	ug/L	2.0	U	U	Yes	
Carbon disulfide	1.0	ug/L	2.0	U	U	Yes	
Methyl acetate	1.0	ug/L	2.0	U	U	Yes	
Methylene chloride	1.0	ug/L	2.0	U	U	Yes	
trans-1,2-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
Methyl tert-butyl ether	1.0	ug/L	2.0	U	U	Yes	
1,1-Dichloroethane	1.0	ug/L	2.0	U	U	Yes	
cis-1,2-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
2-Butanone	10	ug/L	2.0	U	U	Yes	
Bromochloromethane	1.0	ug/L	2.0	U	U	Yes	
Chloroform	1.0	ug/L	2.0	U	U	Yes	
1,1,1-Trichloroethane	1.0	ug/L	2.0	U	U	Yes	
Cyclohexane	1.0	ug/L	2.0	U	U	Yes	
Carbon tetrachloride	1.0	ug/L	2.0	U	U	Yes	
Benzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichloroethane	1.0	ug/L	2.0	U	U	Yes	
Trichloroethene	1.0	ug/L	2.0	U	U	Yes	
Methylcyclohexane	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichloropropane	1.0	ug/L	2.0	U	U	Yes	
Bromodichloromethane	1.0	ug/L	2.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	1.0	ug/L	2.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/L	2.0	U	U	Yes	
Toluene	1.0	ug/L	2.0	U	U	Yes	
trans-1,3-Dichloropropene	1.0	ug/L	2.0	U	U	Yes	
1,1,2-Trichloroethane	1.0	ug/L	2.0	U	U	Yes	
Tetrachloroethene	25	ug/L	2.0	D		Yes	
2-Hexanone	10	ug/L	2.0	U	U	Yes	
Dibromochloromethane	1.0	ug/L	2.0	U	U	Yes	
1,2-Dibromoethane	1.0	ug/L	2.0	U	U	Yes	
Chlorobenzene	1.0	ug/L	2.0	U	U	Yes	
Ethylbenzene	1.0	ug/L	2.0	U	U	Yes	
o-Xylene	1.0	ug/L	2.0	U	U	Yes	
m,p-Xylene	1.0	ug/L	2.0	U	U	Yes	
Styrene	1.0	ug/L	2.0	U	U	Yes	
Bromoform	1.0	ug/L	2.0	U	U	Yes	
Isopropylbenzene	1.0	ug/L	2.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	1.0	ug/L	2.0	U	U	Yes	
1,3-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,4-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	1.0	ug/L	2.0	U	U	Yes	
1,2,4-Trichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2,3-Trichlorobenzene	1.0	ug/L	2.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-3	pH:	2.0	Sample Date:	12192011	Sample Time:	10:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	18	ug/L	1.0		J	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	130	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LD9DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-3	pH:	2.0	Sample Date:	12192011	Sample Time:	10:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	20	ug/L	40.0	U	U	Yes	
Chloromethane	20	ug/L	40.0	U	U	Yes	
Vinyl chloride	20	ug/L	40.0	U	U	Yes	
Bromomethane	20	ug/L	40.0	U	U	Yes	
Chloroethane	20	ug/L	40.0	U	U	Yes	
Trichlorofluoromethane	20	ug/L	40.0	U	U	Yes	
1,1-Dichloroethene	20	ug/L	40.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	20	ug/L	40.0	U	U	Yes	
Acetone	200	ug/L	40.0	U	U	Yes	
Carbon disulfide	20	ug/L	40.0	U	U	Yes	
Methyl acetate	20	ug/L	40.0	U	U	Yes	
Methylene chloride	20	ug/L	40.0	U	U	Yes	
trans-1,2-Dichloroethene	20	ug/L	40.0	U	U	Yes	
Methyl tert-butyl ether	20	ug/L	40.0	U	U	Yes	
1,1-Dichloroethane	20	ug/L	40.0	U	U	Yes	
cis-1,2-Dichloroethene	20	ug/L	40.0	U	U	Yes	
2-Butanone	200	ug/L	40.0	U	U	Yes	
Bromochloromethane	20	ug/L	40.0	U	U	Yes	
Chloroform	20	ug/L	40.0	U	U	Yes	
1,1,1-Trichloroethane	20	ug/L	40.0	U	U	Yes	
Cyclohexane	20	ug/L	40.0	U	U	Yes	
Carbon tetrachloride	20	ug/L	40.0	U	U	Yes	
Benzene	20	ug/L	40.0	U	U	Yes	
1,2-Dichloroethane	20	ug/L	40.0	U	U	Yes	
Trichloroethene	22	ug/L	40.0	D		Yes	
Methylcyclohexane	20	ug/L	40.0	U	U	Yes	
1,2-Dichloropropane	20	ug/L	40.0	U	U	Yes	
Bromodichloromethane	20	ug/L	40.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	20	ug/L	40.0	U	U	Yes	
4-Methyl-2-pentanone	200	ug/L	40.0	U	U	Yes	
Toluene	20	ug/L	40.0	U	U	Yes	
trans-1,3-Dichloropropene	20	ug/L	40.0	U	U	Yes	
1,1,2-Trichloroethane	20	ug/L	40.0	U	U	Yes	
Tetrachloroethene	300	ug/L	40.0	D		Yes	
2-Hexanone	200	ug/L	40.0	U	U	Yes	
Dibromochloromethane	20	ug/L	40.0	U	U	Yes	
1,2-Dibromoethane	20	ug/L	40.0	U	U	Yes	
Chlorobenzene	20	ug/L	40.0	U	U	Yes	
Ethylbenzene	20	ug/L	40.0	U	U	Yes	
o-Xylene	20	ug/L	40.0	U	U	Yes	
m,p-Xylene	20	ug/L	40.0	U	U	Yes	
Styrene	20	ug/L	40.0	U	U	Yes	
Bromoform	20	ug/L	40.0	U	U	Yes	
Isopropylbenzene	20	ug/L	40.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	20	ug/L	40.0	U	U	Yes	
1,3-Dichlorobenzene	20	ug/L	40.0	U	U	Yes	
1,4-Dichlorobenzene	20	ug/L	40.0	U	U	Yes	
1,2-Dichlorobenzene	20	ug/L	40.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	20	ug/L	40.0	U	U	Yes	
1,2,4-Trichlorobenzene	20	ug/L	40.0	U	U	Yes	
1,2,3-Trichlorobenzene	20	ug/L	40.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LE1	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-5	pH:	2.0	Sample Date:	12192011	Sample Time:	13:15:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.22	ug/L	1.0	J	J	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	UJ	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	
Tetrachloroethene	21	ug/L	1.0	E	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	E5LE1DL	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW-5	pH:	2.0	Sample Date:	12192011	Sample Time:	13:15:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	1.0	ug/L	2.0	U	U	Yes	
Chloromethane	1.0	ug/L	2.0	U	U	Yes	
Vinyl chloride	1.0	ug/L	2.0	U	U	Yes	
Bromomethane	1.0	ug/L	2.0	U	U	Yes	
Chloroethane	1.0	ug/L	2.0	U	U	Yes	
Trichlorofluoromethane	1.0	ug/L	2.0	U	U	Yes	
1,1-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	ug/L	2.0	U	U	Yes	
Acetone	10	ug/L	2.0	U	U	Yes	
Carbon disulfide	1.0	ug/L	2.0	U	U	Yes	
Methyl acetate	1.0	ug/L	2.0	U	U	Yes	
Methylene chloride	1.0	ug/L	2.0	U	U	Yes	
trans-1,2-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
Methyl tert-butyl ether	1.0	ug/L	2.0	U	U	Yes	
1,1-Dichloroethane	1.0	ug/L	2.0	U	U	Yes	
cis-1,2-Dichloroethene	1.0	ug/L	2.0	U	U	Yes	
2-Butanone	10	ug/L	2.0	U	U	Yes	
Bromochloromethane	1.0	ug/L	2.0	U	U	Yes	
Chloroform	1.0	ug/L	2.0	U	U	Yes	
1,1,1-Trichloroethane	1.0	ug/L	2.0	U	U	Yes	
Cyclohexane	1.0	ug/L	2.0	U	U	Yes	
Carbon tetrachloride	1.0	ug/L	2.0	U	U	Yes	
Benzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichloroethane	1.0	ug/L	2.0	U	U	Yes	
Trichloroethene	1.0	ug/L	2.0	U	U	Yes	
Methylcyclohexane	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichloropropane	1.0	ug/L	2.0	U	U	Yes	
Bromodichloromethane	1.0	ug/L	2.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	1.0	ug/L	2.0	U	U	Yes	
4-Methyl-2-pentanone	10	ug/L	2.0	U	U	Yes	
Toluene	1.0	ug/L	2.0	U	U	Yes	
trans-1,3-Dichloropropene	1.0	ug/L	2.0	U	U	Yes	
1,1,2-Trichloroethane	1.0	ug/L	2.0	U	U	Yes	
Tetrachloroethene	24	ug/L	2.0	D		Yes	
2-Hexanone	10	ug/L	2.0	U	U	Yes	
Dibromochloromethane	1.0	ug/L	2.0	U	U	Yes	
1,2-Dibromoethane	1.0	ug/L	2.0	U	U	Yes	
Chlorobenzene	1.0	ug/L	2.0	U	U	Yes	
Ethylbenzene	1.0	ug/L	2.0	U	U	Yes	
o-Xylene	1.0	ug/L	2.0	U	U	Yes	
m,p-Xylene	1.0	ug/L	2.0	U	U	Yes	
Styrene	1.0	ug/L	2.0	U	U	Yes	
Bromoform	1.0	ug/L	2.0	U	U	Yes	
Isopropylbenzene	1.0	ug/L	2.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	1.0	ug/L	2.0	U	U	Yes	
1,3-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,4-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	1.0	ug/L	2.0	U	U	Yes	
1,2,4-Trichlorobenzene	1.0	ug/L	2.0	U	U	Yes	
1,2,3-Trichlorobenzene	1.0	ug/L	2.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	VBLK5T	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	VBLK5U	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.29	ug/L	1.0	J	J	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	VBLK5V	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Case No:	42079	Contract:	EPW11033	SDG No:	E5LB4	Lab Code:	MITKEM
Sample Number:	VHBLK5V	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	7.0	Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	
Chloromethane	0.50	ug/L	1.0	U	U	Yes	
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	
Bromomethane	0.50	ug/L	1.0	U	U	Yes	
Chloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	
Acetone	5.0	ug/L	1.0	U	U	Yes	
Carbon disulfide	0.50	ug/L	1.0	U	U	Yes	
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Butanone	5.0	ug/L	1.0	U	U	Yes	
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	
Chloroform	0.50	ug/L	1.0	U	U	Yes	
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	
Benzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	
Toluene	0.50	ug/L	1.0	U	U	Yes	
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	
o-Xylene	0.50	ug/L	1.0	U	U	Yes	
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	
Styrene	0.50	ug/L	1.0	U	U	Yes	
Bromoform	0.50	ug/L	1.0	U	U	Yes	
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 13 Jan 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: DEPA

We have reviewed the data for the following case:

SITE NAME: Mullins Rubber Products (OH)

CASE NUMBER: 42079 SDG NUMBER: E5LB4

Number and Type of Samples: 7 water samples

Sample Numbers: E5LB4-B5; D5; D7-D9; E1

Laboratory: Mitkem Hrs for Review: 8

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J



Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number E5LB4

Laboratory Name Mitkem Laboratories Lab Code MITKEM
Contract No. EP-W-11-033 Case No. 42079
Analysis Price \$430 SDG Turnaround 21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) E5LB4	08) E5LD9		
02) E5LB4MS	09) E5LE1		
03) E5LB4MSD			
04) E5LB5			
05) E5LD5			
06) E5LD7			
07) E5LD8			

First Sample in SDG

E5LB4

Last Sample in SDG

E5LE1

First Sample Receipt Date

12/21/2011

Last Sample Receipt Date

12/21/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature

Agnieszka Kuntz

Date 12/22/2011



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 42079
DAS No:
SDG No: E5LB4

L

Date Shipped: 12/20/2011 Carrier Name: FedEx Airbill: 866389086438 Shipped to: Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400	Chain of Custody Record		Sampler Signature: <i>[Signature]</i>		For Lab Use Only	
	Relinquished By	(Date / Time)	Received By	(Date / Time)	Lab Contract No:	EP-W-11-033
	<i>[Signature]</i>	12/12/11 12:00	<i>[Signature]</i>	12-21-11 9:50	Unit Price:	\$430
	2				Transfer To:	-
	3				Lab Contract No:	-
4				Unit Price:	-	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E5LB4	Ground Water/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001841 (HCL), 5C-001842 (HCL), 5C-001843 (HCL) (3)	GW-2	S: 12/19/2011 15:20		Good ↓ Good
E5LB5	Ground Water/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001844 (HCL), 5C-001845 (HCL), 5C-001846 (HCL) (3)	GW-3	S: 12/19/2011 16:00		
E5LD5	Field QC/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-001860 (HCL), 5C-001892 (HCL), 5C-001893 (HCL) (3)	TB-4	S: 12/12/2011 12:00		
E5LD7	Monitor Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121951 (HCL), 5C-121952 (HCL), 5C-121953 (HCL) (3)	MW-1	S: 12/19/2011 14:20		
E5LD8	Monitor Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121954 (HCL), 5C-121955 (HCL), 5C-121956 (HCL) (3)	MW-2	S: 12/19/2011 13:00		
E5LD9	Monitor Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121957 (HCL), 5C-121958 (HCL), 5C-121959 (HCL) (3)	MW-3	S: 12/19/2011 10:45		
E5LE1	Monitor Well/ Wendy Vorwerk	L/G	CLP TVOA (21)	5C-121963 (HCL), 5C-121964 (HCL), 5C-121965 (HCL) (3)	MW-5	S: 12/19/2011 13:15		

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 8.0C	Chain of Custody Seal Number: 29032, 29029
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
CLP TVOA = CLP TCL Trace Volatiles				

TR Number: 5-131260284-122011-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

F2V51.047 Page 1 of 1

JAN 13 2012

Report Date:
09-Jan-12 10:51



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Computer Science Corporation
15000 Conference Center Drive
Chantilly, VA 20151-3808

Work Order: K2690
SDG No: E5LB4
Case No: 42079

Attn: Nazy Abousaeedi

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
K2690-01	E5LB4	Aqueous	19-Dec-11 15:20	21-Dec-11 09:50
K2690-02	E5LB5	Aqueous	19-Dec-11 16:00	21-Dec-11 09:50
K2690-03	E5LD5	Aqueous	12-Dec-11 12:00	21-Dec-11 09:50
K2690-04	E5LD7	Aqueous	19-Dec-11 14:20	21-Dec-11 09:50
K2690-05	E5LD8	Aqueous	19-Dec-11 13:00	21-Dec-11 09:50
K2690-06	E5LD9	Aqueous	19-Dec-11 10:45	21-Dec-11 09:50
K2690-07	E5LE1	Aqueous	19-Dec-11 13:15	21-Dec-11 09:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

SDG Narrative

Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division submits the enclosed data package in response to USEPA Case # 42079 and SDG# E5LB4. Analyses were performed for seven aqueous samples that were received on December 21, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that the sample-shipping cooler received on December 21 was measured at 8.0°C.

The following samples are submitted in this data package:

<u>Client ID</u>	<u>Lab ID</u>	<u>Analysis</u>	<u>VOA pH</u>
E5LB4	K2690-01A	TV	< 2
E5LB4MS	K2690-01AMS	TV	< 2
E5LB4MSD	K2690-01AMSD	TV	< 2
E5LB5	K2690-02A	TV	< 2
E5LD5	K2690-03A	TV	< 2
E5LD7	K2690-04A	TV	< 2
E5LD8	K2690-05A	TV	< 2
E5LD8DL	K2690-05ADL	TV	< 2
E5LD9	K2690-06A	TV	< 2
E5LD9DL	K2690-06ADL	TV	< 2
E5LE1	K2690-07A	TV	< 2
E5LE1DL	K2690-07ADL	TV	< 2

TV = Trace Volatiles

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (SOM01.2) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

SAMPLE RECEIPT:

The TR/COC does not designate a sample as laboratory QC for SDG E5LB4; however, per Scheduling laboratory QC is required. The laboratory received 3 vials for TVOA analysis. This is insufficient volume for laboratory QC. The laboratory can perform laboratory QC on sample E5LB4 but no volume will remain for reanalysis or re-analysis at a dilution. Per Region 5, the lab shall note the issue in the SDG Narrative and proceed with analysis and laboratory QC on sample E5LB4.

Trace Volatile Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP
SOM 1.2 VOC TRACE

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu\text{g/L}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(25)}{V_o}$$

where: Amt = on-column amount on raw data

DF = Dilution factor

UF = ng unit correction factor

V_o = Sample volume purged (mL)

The following equation was used to calculate the Amt in the previous equation:

$$\text{Amt} = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured

A_{is} = area of the characteristic ion for the associated internal standard

IS = concentration of internal standard in ug/L

RRF = relative response factor

III. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code:
SW5030B

IV. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: V5
Instrument Type: GCMS-VOA
Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

~~Secondary ion 65 was used in the quantitation of 1,1-dichloroethene-d2 instead of primary ion 63 due to the interference with target compound 1,1-dichloroethene in the calibration standards.~~

B. Blanks:

All method blanks were within the acceptance criteria.

C. DMC Recoveries:

DMC recoveries were within the QC limits with the exception of the following:

E5LB4: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 56% with criteria of (73-121).

E5LB5: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 58% with criteria of (73-121).

E5LD5: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 59% with criteria of (73-121).

E5LD7: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 67% with criteria of (73-121).

E5LD8: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 58% with criteria of (73-121).

E5LD8DL: recovery is above criteria for 1,1-Dichloroethene-d2 at 105% with

criteria of (55-104).

E5LD9: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 56% with criteria of (73-121).

E5LD9DL: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104).

E5LE1: recovery is below criteria for trans-1,3-Dichloropropene-d4 at 58% with criteria of (73-121).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample E5LB4.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

E5LD8: Dilution Factor: 2

E5LD9: Dilution Factor: 40

E5LE1: Dilution Factor: 2

G. Samples:

cis-1,3-Dichloropropene-d4 was detected in method blanks and in samples. The volatile organic deuterated monitoring compound spike solution contains both the cis- and trans-1,3-dichloropropene isomers. cis-1,3-Dichloropropene-d4 is not a deuterated monitoring compound for SOM01.2, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

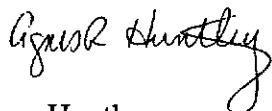
No other unusual observations were made for the analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.



Agnes Huntley
CLP Project Manager
01/09/12

Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com]
Sent: Thursday, December 22, 2011 4:14 PM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Cc: Vorwerk, Wendy; Carlene Thomas; Howard Pham; roberman.alida@epa.gov; Prendiville.Timothy@epamail.epa.gov; Warren Layne
Subject: Region 05 | Case 42079 | Lab MITKEM | SDG E5LB4 | Issue Insufficient volume | FINAL

Agnes,,

*****Summary Start*****

Issue: The TR/COC does not designate a sample as laboratory QC for SDG E5LB4; however, per Scheduling laboratory QC is required. The laboratory received 3 vials for TVOA analysis. This is insufficient volume for laboratory QC. The laboratory can perform laboratory QC on sample E5LB4 but no volume will remain for re-analysis or re-analysis at a dilution.

Resolution: Per Region 5, the lab shall note the issue in the SDG Narrative and proceed with analysis and laboratory QC on sample E5LB4.

*****Summary End*****

Let me know if you have any questions.

Thanks,

Please note: To waive any defect(s) associated with this issue, please contact your PO.

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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-----Original Message-----

From: Timothy Prendiville [mailto:Prendiville.Timothy@epamail.epa.gov]
Sent: Thursday, December 22, 2011 2:06 PM
To: Mroz, Ryan
Cc: Alida Roberman; Carlene Thomas; Howard Pham; Warren Layne
Subject: RE: Region 05 | Case 42079 | Lab MITKEM | SDG E5LB4 | Issue Insufficient volume

Ryan,

The proposed resolution is acceptable to the Region.

Tim Prendiville, Chief
Remedial Response Section 2
Superfund Division
U.S. EPA (SR-6J)
77 W. Jackson Blvd.

Chicago, IL 60604
(312) 886-5122
toll free (800) 621-8431 ext 65122

From: Mroz, Ryan
Sent: Thursday, December 22, 2011 12:55 PM
To: 'Carlene Thomas'; 'Howard Pham'; 'roberman.alida@epa.gov'; 'Tim Prendiville (Prendiville.Timothy@epamail.epa.gov)'; 'Warren Layne'
Subject: RE: Region 05 | Case 42079 | Lab MITKEM | SDG E5LB4 | Issue Insufficient volume

Warren,

MITKEM is reporting the following Issue with Case 42079. Please advise if the PROPOSED Resolution is acceptable to Region 5. I have included to note the issue in the SDG Narrative.

Issue: The TR/COC does not designate a sample as laboratory QC for SDG E5LB4; however, per Scheduling laboratory QC is required. The laboratory received 3 vials for TVOA analysis. This is insufficient volume for laboratory QC. The laboratory can perform laboratory QC on sample E5LB4 but no volume will remain for re-analysis or re-analysis at a dilution.

PROPOSED Resolution: Per Region 5, the lab shall note the issue in the SDG Narrative and proceed with analysis and laboratory QC on sample E5LB4.

Let me know if you have any questions.
Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Vorwerk, Wendy [<mailto:wendy.vorwerk@epa.state.oh.us>]
Sent: Thursday, December 22, 2011 12:50 PM
To: Mroz, Ryan
Subject: RE: Region 05 | Case 42079 | Lab MITKEM | SDG E5LB4 | Issue Insufficient volume

Proceed.

From: Mroz, Ryan [<mailto:rmroz@fedcsc.com>]
Sent: Thursday, December 22, 2011 12:47 PM
To: Vorwerk, Wendy; Sigler, Victoria
Cc: Carlene Thomas; Howard Pham; roberman.alida@epa.gov; Prendiville.Timothy@epamail.epa.gov; Warren Layne
Subject: Re: Region 05 | Case 42079 | Lab MITKEM | SDG E5LB4 | Issue Insufficient volume

Wendy,

MITKEM is reporting the following Issue with Case 42079. Please advise the laboratory how to proceed..

Issue: The TR/COC does not designate a sample as laboratory QC for SDG E5LB4; however, per Scheduling laboratory QC is required. The laboratory received 3 vials for TVOA analysis. This is insufficient volume for laboratory QC. The laboratory can perform laboratory QC on sample E5LB4 but no volume will remain for re-analysis or re-analysis at a dilution.

Let me know if you have any questions.

Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Thursday, December 22, 2011 12:40 PM
To: Mroz, Ryan
Subject: RE: Case 42079 SDG E5LB4

Hi Ryan,

We can perform lab QC on sample E5LB4.

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499

From: Mroz, Ryan [<mailto:rmroz@fedcsc.com>]
Sent: Thursday, December 22, 2011 12:01 PM
To: Agnes Huntley [Warwick]
Subject: RE: Case 42079 SDG E5LB4

Agnes,

The region will ask if you can do laboratory QC and what sample you would select if there was no volume left for re-analysis/re-analysis at a dilution.

Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Agnes Huntley [Warwick] [mailto:agnes_nq@mitkem.com]
Sent: Thursday, December 22, 2011 11:58 AM
To: Mroz, Ryan
Subject: Case 42079 SDG E5LB4

Hi Ryan,

Scheduling notes that lab QC is required for TVOA. A sample was not designated on the TR/COC. The laboratory only received three VOA vials for each sample for TVOA analysis. This is insufficient sample volume for lab QC. How is the lab to proceed?

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499

Due to rising cost of rush shipments, Spectrum Analytical requests that you allow sufficient time for all sample bottle order requests, 3 days notice at a minimum. If you need an expedited bottle order request Spectrum Analytical will provide the bottles but will request that you pay for the shipping. Spectrum Analytical will continue to pay for all shipping previously agreed to, given proper notification. Thank you for your understanding and cooperation

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2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLK5T	106	103	100	104	93	90	88
02	E5LB5	107	114	101	95	97	98	90
03	E5LD5	107	111	104	88	95	95	91
04	E5LD7	107	108	101	92	94	97	100
05	E5LD8	106	107	99	89	96	97	92
06	E5LE1	108	111	101	94	98	98	86
07	E5LD9	105	111	100	92	97	95	92
08	VBLK5U	104	110	100	94	95	94	90
09	E5LB4	107	113	100	94	97	97	91
10	E5LB4MS	108	115	102	95	96	95	92
11	E5LB4MSD	103	111	100	96	94	92	90
12	VBLK5V	108	117	103	104	96	94	94
13	E5LD8DL	109	116	105 *	98	98	97	95
14	E5LD9DL	109	114	110 *	96	96	95	93
15	E5LE1DL	109	114	103	96	96	96	95
16	VHBLK5V	111	117	103	97	96	95	95

QC LIMITS

VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLK5T	84	93	94	99	90	87		0
02	E5LB5	82	92	58 *	78	90	91		1
03	E5LD5	83	92	59 *	79	88	92		1
04	E5LD7	93	97	67 *	97	95	92		1
05	E5LD8	82	93	58 *	80	92	90		1
06	E5LE1	83	91	58 *	79	87	88		1
07	E5LD9	86	95	56 *	82	93	87		1
08	VBLK5U	83	93	92	91	91	87		0
09	E5LB4	85	93	56 *	80	91	91		1
10	E5LB4MS	83	93	90	94	87	89		0
11	E5LB4MSD	87	94	89	93	89	87		0
12	VBLK5V	87	96	93	101	92	87		0
13	E5LD8DL	89	98	94	91	87	86		1
14	E5LD9DL	88	96	94	93	91	89		1
15	E5LE1DL	88	97	94	94	91	85		0
16	VHBLK5V	91	97	92	98	91	90		0

QC LIMITS

VDMC8 (DPA) = 1,2-Dichloropropane-d6 (79-124)
VDMC9 (TOL) = Toluene-d8 (77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4 (73-121)
VDMC11 (HEX) = 2-Hexanone-d5 (28-135)
VDMC12 (TCA) = 1,1,2,2-Tetrachloroethane-d2 (73-125)
VDMC13 (DCZ) = 1,2-Dichlorobenzene-d4 (80-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix Spike - EPA Sample No.: E5LB4 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	5.0000	0.0000	5.1595	103		61-145
Benzene	5.0000	0.0000	4.9218	98		76-127
Trichloroethene	5.0000	0.4701	4.8572	88		71-120
Toluene	5.0000	0.0000	4.8226	96		76-125
Chlorobenzene	5.0000	0.0000	5.0156	100		75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD #	QC LIMITS	
						RPD	REC.
1,1-Dichloroethene	5.0000	4.7698	95		8	0-14	61-145
Benzene	5.0000	4.5491	91		8	0-11	76-127
Trichloroethene	5.0000	4.9347	89		2	0-14	71-120
Toluene	5.0000	4.5451	91		6	0-13	76-125
Chlorobenzene	5.0000	4.7642	95		5	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5T

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Lab File ID: V5N4223.D Lab Sample ID: MB-63956
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/30/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 19:53
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LB5	K2690-02A	V5N4235.D	1:11
02	E5LD5	K2690-03A	V5N4236.D	1:40
03	E5LD7	K2690-04A	V5N4237.D	2:09
04	E5LD8	K2690-05A	V5N4238.D	2:38
05	E5LE1	K2690-07A	V5N4239.D	3:06
06	E5LD9	K2690-06A	V5N4245.D	5:59

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Lab File ID: V5N4247.D Lab Sample ID: MB-63998
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/31/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 6:56
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LB4	K2690-01A	V5N4249.D	7:54
02	E5LB4MS	K2690-01AMS	V5N4260.D	13:13
03	E5LB4MSD	K2690-01AMSD	V5N4268.D	17:00

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Lab File ID: V5N4272.D Lab Sample ID: MB-64023
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/31/2011
Level: (TRACE or LOW/MED) TRACE Time Analyzed: 18:27
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5LD8DL	K2690-05ADL	V5N4278.D	20:52
02	E5LD9DL	K2690-06ADL	V5N4279.D	21:20
03	E5LE1DL	K2690-07ADL	V5N4280.D	21:49
04	VHBLK5V	VHBLK5V	V5N4292.D	3:34

COMMENTS:

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD####): VSTD0055T Date Analyzed: 12/30/2011
 Lab File ID (Standard): V5N4222.D Time Analyzed: 19:25
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	715026	9.431	817632	6.319	315786	12.172
UPPER LIMIT	1001036	9.761	1144685	6.649	442100	12.502
LOWER LIMIT	429016	9.101	490579	5.989	189472	11.842
EPA SAMPLE NO.						
01 VBLK5T	745425	9.431	990528	6.319	301537	12.183
02 E5LB5	792566	9.432	1016975	6.320	291279	12.184
03 E5LD5	765730	9.437	1001627	6.324	293393	12.177
04 E5LD7	725048	9.432	1058223	6.320	211471	12.184
05 E5LD8	720848	9.426	964032	6.325	283064	12.178
06 E5LE1	770218	9.432	972960	6.319	292805	12.184
07 E5LD9	749519	9.426	997176	6.325	299765	12.178

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD#####): VSTD0055U Date Analyzed: 12/31/2011
 Lab File ID (Standard): V5N4246.D Time Analyzed: 6:28
 Instrument ID: V5 Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	722286	9.432	843175	6.319	319743	12.172
UPPER LIMIT	1011200	9.762	1180445	6.649	447640	12.502
LOWER LIMIT	433372	9.102	505905	5.989	191846	11.842
EPA SAMPLE NO.						
01 VBLK5U	796891	9.432	1044661	6.320	313567	12.185
02 E5LB4	789716	9.426	1026049	6.325	306180	12.178
03 E5LB4MS	744612	9.425	977783	6.325	279924	12.189
04 E5LB4MSD	722432	9.431	975368	6.318	286429	12.183

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/2011 12/14/2011
 EPA Sample No. (VSTD#####): VSTD0055V Date Analyzed: 12/31/2011
 Lab File ID (Standard): V5N4271.D Time Analyzed: 17:58
 Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	769070	9.426	1047244	6.325	324631	12.166
	UPPER LIMIT	1076698	9.756	1466142	6.655	454483	12.496
	LOWER LIMIT	461442	9.096	628346	5.995	194779	11.836
	EPA SAMPLE NO.						
01	VBLK5V	791198	9.425	1076529	6.325	304382	12.178
02	E5LD8DL	738332	9.437	999234	6.325	270908	12.189
03	E5LD9DL	746194	9.431	1009492	6.319	279263	12.184
04	E5LE1DL	743514	9.432	1039884	6.320	285747	12.184
05	VHBLK5V	738767	9.431	1014135	6.319	281030	12.184

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4249.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4249.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.47	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	9.5	B
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4249.D

Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB4MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01AMS
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4260.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		5.2	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		4.9	
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB4MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01AMS
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4260.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	4.9	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.8	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	11	B
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	5.0	
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB4MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01AMSD
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4268.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	4.8	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	4.5	
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5LB4MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-01AMSD
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4268.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ g/L	Q
79-01-6	Trichloroethene	4.9	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.5	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	10	B
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	4.8	
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-02A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4235.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LB5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4235.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LB5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-02A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4235.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-03A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4236.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	7.6	
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-03A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4236.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-03A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4236.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-04A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4237.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	10 4.4	J
75-15-0	Carbon disulfide	0.29	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.46	J
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

2/9/12
MT

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4237.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.25	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.35	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-04A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4237.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4238.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4238.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethane	0.28	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	23	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4238.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4278.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/L}$	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	1.0	U
79-20-9	Methyl acetate	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4278.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	1.0	U
108-87-2	Methylcyclohexane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	25	D
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD8DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-05ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4278.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4245.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4245.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	18	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	130	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06A
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4245.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD9DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4279.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 40.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{G/L}$	Q
75-71-8	Dichlorodifluoromethane	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
67-64-1	Acetone	200	U
75-15-0	Carbon disulfide	20	U
79-20-9	Methyl acetate	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	20	U
156-59-2	cis-1,2-Dichloroethene	20	U
78-93-3	2-Butanone	200	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	20	U
110-82-7	Cyclohexane	20	U
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
107-06-2	1,2-Dichloroethane	20	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LD9DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4279.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 40.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	22	D
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	300	D
591-78-6	2-Hexanone	200	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LD9DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-06ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4279.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 40.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LE1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4239.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LE1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4239.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.22	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	21	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LE1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07A
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4239.D
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LE1DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4280.D
Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	1.0	U
79-20-9	Methyl acetate	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E5LE1DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4280.D

Level: (TRACE/LOW/MED) TRACE Date Received: 12/21/2011

% Moisture: not dec. Date Analyzed: 12/31/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µG/L</u>	Q
79-01-6	Trichloroethene	1.0	U
108-87-2	Methylcyclohexane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	24	D
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E5LE1DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2690-07ADL
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4280.D
Level: (TRACE or LOW/MED) TRACE Date Received: 12/21/2011
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679614	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63956
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4223.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/30/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63956
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4223.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/30/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5T

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63956
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4223.D
 Level: (TRACE or LOW/MED) TRACE Date Received:
 % Moisture: not dec. Date Analyzed: 12/30/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63998
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4247.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63998
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4247.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.29	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5U

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63998
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4247.D
 Level: (TRACE or LOW/MED) TRACE Date Received:
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E9667961	Total Alkanes	N/A		

¹EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64023
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4272.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	ug/L	
75-71-8	Dichlorodifluoromethane		0.50	U
74-87-3	Chloromethane		0.50	U
75-01-4	Vinyl chloride		0.50	U
74-83-9	Bromomethane		0.50	U
75-00-3	Chloroethane		0.50	U
75-69-4	Trichlorofluoromethane		0.50	U
75-35-4	1,1-Dichloroethene		0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U
67-64-1	Acetone		5.0	U
75-15-0	Carbon disulfide		0.50	U
79-20-9	Methyl acetate		0.50	U
75-09-2	Methylene chloride		0.50	U
156-60-5	trans-1,2-Dichloroethene		0.50	U
1634-04-4	Methyl tert-butyl ether		0.50	U
75-34-3	1,1-Dichloroethane		0.50	U
156-59-2	cis-1,2-Dichloroethene		0.50	U
78-93-3	2-Butanone		5.0	U
74-97-5	Bromochloromethane		0.50	U
67-66-3	Chloroform		0.50	U
71-55-6	1,1,1-Trichloroethane		0.50	U
110-82-7	Cyclohexane		0.50	U
56-23-5	Carbon tetrachloride		0.50	U
71-43-2	Benzene		0.50	U
107-06-2	1,2-Dichloroethane		0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64023
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4272.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 12/31/2011
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
 Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64023
 Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4272.D
 Level: (TRACE or LOW/MED) TRACE Date Received:
 % Moisture: not dec. Date Analyzed: 12/31/2011
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5V
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4292.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 01/01/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) μ G/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5V
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4292.D
Level: (TRACE/LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 01/01/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) $\mu\text{g/L}$	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SOM01.2 (6/2007)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033
Lab Code: MITKEM Case No.: 42079 Mod. Ref No.: SDG No.: E5LB4
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5V
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N4292.D
Level: (TRACE or LOW/MED) TRACE Date Received:
% Moisture: not dec. Date Analyzed: 01/01/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) µg/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

Appendix E

Contract Required Quantitation Limits

Table 1. Target Compound List (TCL) and Contract Required Quantitation Limits (CRQLs) for SOM01.1*

Quantitation Limits						Quantitation Limits					
	Trace Water by SIM (µg/L)	Trace Water (µg/L)	Low Water (µg/L)	Low Soil (µg/kg)	Med. Soil (µg/kg)		Trace Water by SIM (µg/L)	Trace Water (µg/L)	Low Water (µg/L)	Low Soil (µg/kg)	Med. Soil (µg/kg)
<u>VOLATILES</u>						<u>VOLATILES (CON'T)</u>					
1. Dichlorodifluoromethane		0.50	5.0	5.0	250	40. Ethylbenzene		0.50	5.0	5.0	250
2. Chloromethane		0.50	5.0	5.0	250	41. o-Xylene		0.50	5.0	5.0	250
3. Vinyl Chloride		0.50	5.0	5.0	250	42. m, p-Xylene		0.50	5.0	5.0	250
4. Bromomethane		0.50	5.0	5.0	250	43. Styrene		0.50	5.0	5.0	250
5. Chloroethane		0.50	5.0	5.0	250	44. Bromoform		0.50	5.0	5.0	250
6. Trichlorofluoromethane		0.50	5.0	5.0	250	45. Isopropylbenzene		0.50	5.0	5.0	250
7. 1,1-Dichloroethene		0.50	5.0	5.0	250	46. 1,1,2,2-Tetrachloroethane		0.50	5.0	5.0	250
8. 1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	5.0	5.0	250	47. 1,3-Dichlorobenzene		0.50	5.0	5.0	250
9. Acetone		5.0	10	10	500	48. 1,4-Dichlorobenzene		0.50	5.0	5.0	250
10. Carbon Disulfide		0.50	5.0	5.0	250	49. 1,2-Dichlorobenzene		0.50	5.0	5.0	250
11. Methyl acetate		0.50	5.0	5.0	250	50. 1,2-Dibromo-3-chloropropane	0.050	0.50	5.0	5.0	250
12. Methylene chloride		0.50	5.0	5.0	250	51. 1,2,4-Trichlorobenzene		0.50	5.0	5.0	250
13. trans-1,2-Dichloroethene		0.50	5.0	5.0	250	52. 1,2,3-Trichlorobenzene		0.50	5.0	5.0	250
14. Methyl tert-butyl ether		0.50	5.0	5.0	250						
							Low Water by SIM (µg/L)	Low Water (µg/L)	Low Soil by SIM (µg/kg)	Low Soil (µg/kg)	Med. Soil (µg/kg)
						<u>SEMIVOLATILES</u>					
15. 1,1-Dichloroethane		0.50	5.0	5.0	250	53. Benzaldehyde		5.0		170	5000
16. cis-1,2-Dichloroethane		0.50	5.0	5.0	250	54. Phenol		5.0		170	5000
17. 2-Butanone		5.0	10	10	500	55. bis-(2-chloroethyl) ether		5.0		170	5000
18. Bromochloromethane		0.50	5.0	5.0	250	56. 2-Chlorophenol		5.0		170	5000
19. Chloroform		0.50	5.0	5.0	250	57. 2-Methylphenol		5.0		170	5000
20. 1,1,1-Trichloroethane		0.50	5.0	5.0	250	58. 2,2'-Oxybis (1-chloropropane)		5.0		170	5000
21. Cyclohexane		0.50	5.0	5.0	250	59. Acetophenone		5.0		170	5000
22. Carbon tetrachloride		0.50	5.0	5.0	250	60. 4-Methylphenol		5.0		170	5000
23. Benzene		0.50	5.0	5.0	250	61. N-Nitroso-di-n propylamine		5.0		170	5000
24. 1,2-Dichloroethane		0.50	5.0	5.0	250	62. Hexachloroethane		5.0		170	5000
25. 1,4-Dioxane	2.0	20	100	100	5000	63. Nitrobenzene		5.0		170	5000
26. Trichloroethene		0.50	5.0	5.0	250	64. Isophorone		5.0		170	5000
27. Methylcyclohexane		0.50	5.0	5.0	250	65. 2-Nitrophenol		5.0		170	5000
28. 1,2-Dichloropropane		0.50	5.0	5.0	250	66. 2,4-Dimethylphenol		5.0		170	5000
29. Bromodichloromethane		0.50	5.0	5.0	250	67. Bis (2-chloroethoxy) methane		5.0		170	5000
30. cis-1,3-Dichloropropene		0.50	5.0	5.0	250	68. 2,4-Dichlorophenol		5.0		170	5000
31. 4-Methyl-2-pentanone		5.0	10	10	500	69. Naphthalene	0.10	5.0	3.3	170	5000
32. Toluene		0.50	5.0	5.0	250	70. 4-Chloroaniline		5.0		170	5000
33. trans-1,3-Dichloropropene		0.50	5.0	5.0	250	71. Hexachlorobutadiene		5.0		170	5000
34. 1,1,2-Trichloroethane		0.50	5.0	5.0	250	72. Caprolactam		5.0		170	5000
35. Tetrachloroethene		0.50	5.0	5.0	250	73. 4-Chloro-3-methylphenol		5.0		170	5000
36. 2-Hexanone		5.0	10	10	500	74. 2-Methylnaphthalene	0.10	5.0	3.3	170	5000
37. Dibromochloromethane		0.50	5.0	5.0	250	75. Hexachlorocyclopentadiene		5.0		170	5000
38. 1,2-Dibromoethane	0.050	0.50	5.0	5.0	250	76. 2,4,6-Trichlorophenol		5.0		170	5000
39. Chlorobenzene		0.50	5.0	5.0	250	77. 2,4,5-Trichlorophenol		5.0		170	5000

* For volatiles, quantitation limits for medium soils are approximately 50 times the quantitation limits for low soils. For semivolatile medium soils, quantitation limits are approximately 50 times the quantitation limits for low soils.

Table 1. Target Compound List (TCL) and Contract Required Quantitation Limits (CRLs) for SOM01.1* (Con't)

Quantitation Limits						Quantitation Limits					
	Low Water by SIM (µg/L)	Low Water (µg/L)	Low Soil by SIM (µg/kg)	Low Soil (µg/kg)	Med. Soil (µg/kg)		Low Water by SIM (µg/L)	Low Water (µg/L)	Low Soil by SIM (µg/kg)	Low Soil (µg/kg)	Med. Soil (µg/kg)
SEMIVOLATILES (CON'T)						SEMIVOLATILES (CON'T)					
78. 1,1'-Biphenyl		5.0		170	5000	115. Benzo(a)pyrene	0.10	5.0	3.3	170	5000
79. 2-Chloronaphthalene		5.0		170	5000	116. Indeno(1,2,3-cd)pyrene	0.10	5.0	3.3	170	5000
80. 2-Nitroaniline		10		330	10000	117. Dibenzo(a,h)anthracene	0.10	5.0	3.3	170	5000
81. Dimethylphthalate		5.0		170	5000	118. Benzo(g,h,i)perylene	0.10	5.0	3.3	170	5000
82. 2,6-Dinitrotoluene		5.0		170	5000	119. 2,3,4,6-Tetrachlorophenol		5.0		170	5000
83. Acenaphthylene	0.10	5.0	3.3	170	5000	PESTICIDES		Water (µg/L)		Soil (µg/kg)	
84. 3-Nitroaniline		10		330	10000	120. alpha-BHC		0.050		1.7	
85. Acenaphthene	0.10	5.0	3.3	170	5000	121. beta-BHC		0.050		1.7	
86. 2,4-Dinitrophenol		10		330	10000	122. delta-BHC		0.050		1.7	
87. 4-Nitrophenol		10		330	10000	123. gamma-BHC (Lindane)		0.050		1.7	
88. Dibenzofuran		5.0		170	5000	124. Heptachlor		0.050		1.7	
89. 2,4-Dinitrotoluene		5.0		170	5000	125. Aldrin		0.050		1.7	
90. Diethylphthalate		5.0		170	5000	126. Heptachlor epoxide		0.050		1.7	
91. Fluorene	0.10	5.0	3.3	170	5000	127. Endosulfan I		0.050		1.7	
92. 4-Chlorophenyl phenyl ether		5.0		170	5000	128. Dieldrin		0.10		3.3	
93. 4-Nitroaniline		10		330	10000	129. 4,4'-DDE		0.10		3.3	
94. 4,6-Dinitro-2-methylphenol		10		330	10000	130. Endrin		0.10		3.3	
95. N-Nitrosodiphenylamine		5.0		170	5000	131. Endosulfan II		0.10		3.3	
96. 1,2,4,5-Tetrachlorobenzene		5.0		170	5000	132. 4,4'-DDD		0.10		3.3	
97. 4-Bromophenyl phenyl ether		5.0		170	5000	133. Endosulfan sulfate		0.10		3.3	
98. Hexachlorobenzene		5.0		170	5000	134. 4,4'-DDT		0.10		3.3	
99. Atrazine		5.0		170	5000	135. Methoxychlor		0.50		17	
100. Pentachlorophenol	0.20	10	6.7	330	10000	136. Endrin ketone		0.10		3.3	
101. Phenanthrene	0.10	5.0	3.3	170	5000	137. Endrin aldehyde		0.10		3.3	
102. Anthracene	0.10	5.0	3.3	170	5000	138. alpha-Chlordane		0.050		1.7	
103. Carbazole		5.0		170	5000	139. gamma-Chlordane		0.050		1.7	
104. Di-n-butylphthalate		5.0		170	5000	140. Toxaphene		5.0		170	
105. Fluoranthene	0.10	5.0	3.3	170	5000	AROCLORS		Water (µg/L)		Soil (µg/kg)	
106. Pyrene	0.10	5.0	3.3	170	5000	141. Aroclor-1016		1.0		33	
107. Butylbenzylphthalate		5.0		170	5000	142. Aroclor-1221		1.0		33	
108. 3,3'-Dichlorobenzidine		5.0		170	5000	143. Aroclor-1232		1.0		33	
109. Benzo(a)anthracene	0.10	5.0	3.3	170	5000	144. Aroclor-1242		1.0		33	
110. Chrysene	0.10	5.0	3.3	170	5000	145. Aroclor-1248		1.0		33	
111. Bis(2-ethylhexyl)phthalate		5.0		170	5000	146. Aroclor-1254		1.0		33	
112. Di-n-octylphthalate		5.0		170	5000	147. Aroclor-1260		1.0		33	
113. Benzo(b)fluoranthene	0.10	5.0	3.3	170	5000	148. Aroclor-1262		1.0		33	
114. Benzo(k)fluoranthene	0.10	5.0	3.3	170	5000	149. Aroclor-1268		1.0		33	


* For volatiles, quantitation limits for medium soils are approximately 50 times the quantitation limits for low soils. For semivolatile medium soils, quantitation limits are approximately 30 times the quantitation limits for low soils.


Table 1. Inorganic Target Analyte List and Contract Required Quantitation Limits (CRQLs)

<u>Analyte</u>	<u>ICP-AES CRQL for Water (µg/L)</u>	<u>ICP-AES CRQL for Soil (mg/kg)</u>	<u>ICP-MS CRQL for Water (µg/L)</u>
1. Aluminum	200	20	--
2. Antimony	60	6	2
3. Arsenic	10	1	1
4. Barium	200	20	10
5. Beryllium	5	0.5	1
6. Cadmium	5	0.5	1
7. Calcium	5000	500	--
8. Chromium	10	1	2
9. Cobalt	50	5	1
10. Copper	25	2.5	2
11. Iron	100	10	--
12. Lead	10	1	1
13. Magnesium	5000	500	--
14. Manganese	15	1.5	1
15. Mercury	0.2	0.1	--
16. Nickel	40	4	1
17. Potassium	5000	500	--
18. Selenium	35	3.5	5
19. Silver	10	1	1
20. Sodium	5000	500	--
21. Thallium	25	2.5	1
22. Vanadium	50	5	5
23. Zinc	60	6	2
24. Cyanide	10	2.5	--

Appendix F

Geoprobe Boring Logs

SB-2		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 1 of 1
Approximate Location (<i>description and/or sketch</i>): <div style="text-align: center;">  North </div>							Start Date: 12/14/11		Drilling & Sampling Method(s): GeoProbe Dual Tube Method		
							Finish Date: 12/14/11				
							Boring Diameter (<i>inches</i>): 2"		Ground Water Depth (<i>feet from grade, boring completion</i>):		Bedrock Depth (<i>feet from grade</i>):
Depth (<i>feet below grade</i>)	Graphic Log	Well/Piez. Construction	Ground Water (<i>ft below grade</i>)		Soil Samples (<i>ft below grade</i>)		PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (<i>weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.</i>): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery				Sample Number	Description of Soil, Fill, Waste, and/or Bedrock
2.5						80				Clayey sand, medium brown with limestone fragments (40%), slightly moist.	Sampling interval began at ground surface.
3.0											
3.5											
4.0											
4.5						70		0		Silty sand, medium brown, with little gravel, slightly moist.	
5.0											
5.5											
6.0											
6.5											
7.0											
7.5											
8.0											
8.5											
9.0											
9.5											
10.0											
10.5											
11.0											
11.5											
12.0											

SB-1		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 1		
Approximate Location (description and/or sketch): <div style="text-align: center;">  North </div>										Start Date: 12/14/11		Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/14/11					
										Boring Diameter (inches): 2"		Ground Water Depth (feet from grade, <u>boring completion</u>):		Bedrock Depth (feet from grade):	
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.				
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill	Drilling & Sampling Notes			
2.5						95		0			Silty clay, reddish brown, firm, plastic, moist	Sampling interval began at ground surface.			
3.0															
3.5															
4.0															
4.5						95		0			Sand, medium brown, with a little gravel and 3" to 4" seams of silty clay, moist with petroleum odor.	Encore sample collected at 13:50			
5.0															
5.5															
6.0															
6.5															
7.0															
7.5															
8.0											Boring terminated at 8.0'				
8.5															
9.0															
9.5															
10.0															
10.5															
11.0															
11.5															
12.0															

PZ-05A		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 2		
Approximate Location (description and/or sketch): <div>North</div>											Start Date: 12/15/11		Drilling & Sampling Method(s): GeoProbe Dual Tube Method		
											Finish Date: 12/15/11				
											Boring Diameter (inches): 2"		Ground Water Depth (feet from grade, <u>boring completion</u>):		Bedrock Depth (feet from grade):
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.				
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill, Waste, and/or Bedrock		Drilling & Sampling Notes		
2.5						20		NA			Same as PZ-5	Sampling interval began at ground surface.			
3.0															
3.5															
4.0															
4.5						30		NA			Same as PZ-5				
5.0															
5.5															
6.0															
6.5															
7.0															
7.5															
8.0															
8.5					20		NA			Same as PZ-5					
9.0															
9.5															
10.0															
10.5															
11.0															
11.5															
12.0															

Boring/Well ID: PZ-05A			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of 2
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/15/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
Description of Soil, Fill, Waste, and/or Bedrock											Drilling & Sampling Notes			
12.5						30		1.6			Silty sand, light to medium brown with little gravel (10%).	Sample collected.		
13.0														
13.5														
14.0														
14.5														
15.0														
15.5														
16.0														
16.5								65		2			Clayey silt, medium brown with a little gravel (<10%), dry,very hard, not plastic.	Encore sample collected 9:50am
17.0														
17.5														
18.0														
18.5														
19.0														
19.5														
20.0														
20.5								55		0			Same as above	
21.0														
21.5														
22.0														
22.5														
23.0														
23.5														
24.0														
24.5						90		0			Same as above, but no gravel Refusal at 27 feet.			
25.0														
25.5														
26.0														

Boring/Well ID:			Facility/Site & Project:							Observer & Affiliation:		Driller(s) & Affiliation:		Page No. 3 of
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.):		Date:	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
											Description of Soil, Fill, Waste, and/or Bedrock			
26.5														
27.0														
27.5														
28.0														
28.5														
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5														
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

PZ-05		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 2			
Approximate Location (description and/or sketch): <div>North</div>										Start Date: 12/14/11			Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/14/11						
										Boring Diameter (inches): 2"			Ground Water Depth (feet from grade, <u>boring completion</u>): Approx. 27.5'			Bedrock Depth (feet from grade):
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.					
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill, Waste, and/or Bedrock		Drilling & Sampling Notes			
2.5						70		0			Sandy silt, light to medium brown with gravel (40 %), dry, hard.		Sampling interval			
3.0													began at ground			
3.5													surface.			
4.0																
4.5																
5.0																
5.5																
6.0																
6.5																
7.0																
7.5																
8.0																
8.5						30		0			Same as above with slightly more gravel.					
9.0																
9.5																
10.0																
10.5																
11.0																
11.5																
12.0																

Boring/Well ID: PZ-05			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of 2
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/14/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
Description of Soil, Fill, Waste, and/or Bedrock											Drilling & Sampling Notes			
12.5						30		0			Same as above.			
13.0														
13.5														
14.0														
14.5														
15.0														
15.5														
16.0														
16.5						25		0			Clayey silt, medium brown, somewhat plastic, moist to wet, at bottom. Limestone fragment in bottom.			
17.0														
17.5														
18.0														
18.5														
19.0														
19.5														
20.0														
20.5						70		0			Clayey silt with gravel (10%), very hard, dry, not plastic.			
21.0														
21.5														
22.0														
22.5														
23.0														
23.5														
24.0														
24.5						70		0			Same as above, slightly moist.			
25.0														
25.5														
26.0														

Ohio EPA Site Investigation Field Unit (SIFU)

Boring/Well ID:			Facility/Site & Project:							Observer & Affiliation:		Driller(s) & Affiliation:		Page No. 3 of
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.):		Date:	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
													Description of Soil, Fill, Waste, and/or Bedrock	
26.5														
27.0														
27.5														
28.0														
28.5														
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5														
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

Ohio EPA Site Investigation Field Unit (SIFU)

PZ-04		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 3			
Approximate Location (description and/or sketch): <div>North</div>										Start Date: 12/14/11			Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/14/11						
										Boring Diameter (inches): 2"			Ground Water Depth (feet from grade, <u>boring completion</u>): 32			Bedrock Depth (feet from grade):
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.					
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill	Drilling & Sampling Notes				
2.5						55		0			Silty clay with gravel, medium reddish brown with gravel, firm, moist, slightly plastic. Bottom 9" silty sand with gravel.	Sampling interval began at ground surface.				
3.0																
3.5																
4.0																
4.5									0							
5.0																
5.5																
6.0																
6.5																
7.0																
7.5																
8.0																
8.5						15		0		Clay with silt and gravel, medium to light brown, dry firm. Some odor.						
9.0																
9.5																
10.0																
10.5																
11.0																
11.5																
12.0																

Boring/Well ID: PZ-04		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio						Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of 3
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)		PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/14/11
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery				Description of Soil, Fill, Waste, and/or Bedrock	Drilling & Sampling Notes	
12.5						65	0			Silty clay, medium gray to brown, little gravel, firm moist and somewhat plastic.		
13.0												
13.5												
14.0												
14.5												
15.0												
15.5												
16.0												
16.5						15	0			Same as above in upper inch, sand and gravel below.		
17.0												
17.5												
18.0												
18.5												
19.0												
19.5												
20.0												
20.5						10	0.5			Silty sand with gravel, light brown, dry, friable.		
21.0												
21.5												
22.0												
22.5												
23.0												
23.5												
24.0												
24.5						10	0			Sames as above but moist.		
25.0												
25.5												
26.0												

Ohio EPA Site Investigation Field Unit (SIFU)

Boring/Well ID: PZ-04			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 3 of 3
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/14/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
Description of Soil, Fill, Waste, and/or Bedrock											Drilling & Sampling Notes			
26.5														
27.0														
27.5														
28.0														
28.5						10		0			Same as above.			
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5						10		0			Same as above. Boring terminated at 35'. Water in boring.			
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

PZ-03		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 2			
Approximate Location (description and/or sketch): <div>North</div>										Start Date: 12/13/11			Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/13/11						
										Boring Diameter (inches): 2"			Ground Water Depth (feet from grade, <u>boring completion</u>): NA			Bedrock Depth (feet from grade):
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.					
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill, Waste, and/or Bedrock		Drilling & Sampling Notes			
2.5						30		0			Silty sand, medium brown with gravel, hard dry friable.	Sampling interval began at ground surface.				
3.0																
3.5																
4.0																
4.5						0		0			No recovery					
5.0																
5.5																
6.0																
6.5																
7.0																
7.5																
8.0																
8.5						20		0			Same as 0' - 4' Very hard and dry with gravel.					
9.0																
9.5																
10.0																
10.5																
11.0																
11.5																
12.0																

Boring/Well ID: PZ-03			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of __2__
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/13/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number						Description of Soil, Fill, Waste, and/or Bedrock	Drilling & Sampling Notes
12.5						30		0			Same as above.			
13.0														
13.5														
14.0														
14.5														
15.0														
15.5														
16.0														
16.5						45		0			Clayey silt, medium brown with gravel, firm, moist in bottom 1 inch.			
17.0														
17.5														
18.0														
18.5														
19.0														
19.5														
20.0														
20.5								95		0		Clayey silt with gravel, hard, slightly moist and slightly plastic.		
21.0														
21.5														
22.0														
22.5														
23.0														
23.5														
24.0														
24.5						40		na		Same as above. Refusal at 26.5 feet				
25.0														
25.5														
26.0														

Ohio EPA Site Investigation Field Unit (SIFU)

Boring/Well ID:			Facility/Site & Project:							Observer & Affiliation:		Driller(s) & Affiliation:		Page No. 3 of
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.):		Date:	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
													Description of Soil, Fill, Waste, and/or Bedrock	
26.5														
27.0														
27.5														
28.0														
28.5														
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5														
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

Ohio EPA Site Investigation Field Unit (SIFU)

PZ-02		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 2		
Approximate Location (description and/or sketch): <div>North</div>										Start Date: 12/13/11		Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/13/11					
										Boring Diameter (inches): 2"		Ground Water Depth (feet from grade, <u>boring completion</u>): Approx. 26'		Bedrock Depth (feet from grade):	
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.				
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill, Waste, and/or Bedrock		Drilling & Sampling Notes		
2.5						40		0			Silty clay,reddish-brown with gravel. Moist and slightly plastic. Sand and gravel in bottom 6 inches.	Sampling interval began at ground surface.			
3.0															
3.5															
4.0															
4.5						40		0			Sandy silt, light to medium brown with gravel. Stiff and dry with petroleum odor.				
5.0															
5.5															
6.0															
6.5															
7.0															
7.5															
8.0															
8.5						40		0.3			Same as above. Very hard and dry with gravel.				
9.0															
9.5															
10.0															
10.5															
11.0															
11.5															
12.0															

Boring/Well ID: PZ-02			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of __2__
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/13/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
Description of Soil, Fill, Waste, and/or Bedrock											Drilling & Sampling Notes			
12.5						25		0			Same as above.			
13.0														
13.5														
14.0														
14.5														
15.0														
15.5														
16.0														
16.5								25		0			Same as above.	
17.0														
17.5														
18.0														
18.5														
19.0														
19.5														
20.0														
20.5								15		0			Same as above, but very moist.	
21.0														
21.5														
22.0														
22.5														
23.0														
23.5														
24.0														
24.5						40		na			Same as above with plastic clay in bottom 8 inches, wet. Refusal at 27.5 feet. Well set at 27.5 feet.	Drill rod wet.		
25.0														
25.5														
26.0														

Ohio EPA Site Investigation Field Unit (SIFU)

Boring/Well ID:			Facility/Site & Project:							Observer & Affiliation:		Driller(s) & Affiliation:		Page No. 3 of
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.):		Date:	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
													Description of Soil, Fill, Waste, and/or Bedrock	
26.5														
27.0														
27.5														
28.0														
28.5														
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5														
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

Ohio EPA Site Investigation Field Unit (SIFU)

PZ-01		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 1 of 2
Approximate Location (description and/or sketch): <div>North</div>							Start Date: 12/13/11		Drilling & Sampling Method(s): GeoProbe Dual Tube Method		
							Finish Date: 12/13/11				
							Boring Diameter (inches): 2"		Ground Water Depth (feet from grade, <u>boring completion</u>): Approx. 26'		Bedrock Depth (feet from grade):
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)		PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery				Sample Number	Description of Soil, Fill, Waste, and/or Bedrock
2.5						25		0		Silty clay, medium brown, moist at top and dry near bottom, slightly plastic. Silty sand with gravel in bottom few inches.	Sampling interval began at ground surface.
3.0											
3.5											
4.0											
4.5						25		0		Light brown silty sand with gravel, dry with petroleum odor.	
5.0											
5.5											
6.0											
6.5											
7.0											
7.5											
8.0											
8.5						30		0.6		Same as above.	
9.0											
9.5											
10.0											
10.5											
11.0											
11.5											
12.0											

Boring/Well ID: PZ-01			Facility/Site & Project: Mullin's Rubber, Riverside, Ohio							Observer & Affiliation: Chuck Mellon/OEPA		Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU		Page No. 2 of __2__
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.		Date: 12/13/11	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
Description of Soil, Fill, Waste, and/or Bedrock											Drilling & Sampling Notes			
12.5						25		0.1			Same as above.			
13.0														
13.5														
14.0														
14.5														
15.0														
15.5														
16.0														
16.5								50		0.1			Silty clay, medium brown with gravel. Stiff, dry with petroleum/chemical odor.	
17.0														
17.5														
18.0														
18.5														
19.0														
19.5														
20.0														
20.5								30		0			Same as above but moist.	
21.0														
21.5														
22.0														
22.5														
23.0														
23.5														
24.0														
24.5						0		0			No recovery Refusal at approximately 26.5 feet BGS Well set at 26.5 feet.	Moisture on drill rod.		
25.0														
25.5														
26.0														

Ohio EPA Site Investigation Field Unit (SIFU)

Boring/Well ID:			Facility/Site & Project:							Observer & Affiliation:		Driller(s) & Affiliation:		Page No. 3 of
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.):		Date:	
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number							
													Description of Soil, Fill, Waste, and/or Bedrock	
26.5														
27.0														
27.5														
28.0														
28.5														
29.0														
29.5														
30.0														
30.5														
31.0														
31.5														
32.0														
32.5														
33.0														
33.5														
34.0														
34.5														
35.0														
35.5														
36.0														
36.5														
37.0														
37.5														
38.0														
38.5														
39.0														
39.5														
40.0														

SB-3		Facility/Site & Project: Mullin's Rubber, Riverside, Ohio					Observer & Affiliation: Chuck Mellon/OEPA			Driller(s) & Affiliation: Karl Reinbold and Jeff Wander/OEPA/SIFU			Page No. 1 of 1			
Approximate Location (description and/or sketch): <div>North</div>										Start Date: 12/14/11			Drilling & Sampling Method(s): GeoProbe Dual Tube Method			
										Finish Date: 12/14/11						
										Boring Diameter (inches): 2"			Ground Water Depth (feet from grade, <u>boring completion</u>):		Bedrock Depth (feet from grade):	
Depth (feet below grade)	Graphic Log	Well/Piez. Construction	Ground Water (ft below grade)		Soil Samples (ft below grade)			PID or FID (ppmv)	Pocket Penetrometer (tons/ft ²)	Unified Soil Classification System - ASTM D 2488	General Notes (weather conditions, monitoring instrument calibration, sampling documentation, logistical difficulties, schedule delays, etc.): Overcast, temps. In mid-30's to mid-40's. Intermittant rain showers.					
			Saturated Interval	Water Level, Date & Time	Sampled Interval	Sample Recovery	Sample Number				Description of Soil, Fill, Waste, and/or Bedrock		Drilling & Sampling Notes			
2.5						99		0			Silty clay with gravel, medium to dark brown, moist firm plastic. Slight petroleum odor.		Sampling interval began at ground surface.			
3.0																
3.5																
4.0																
4.5						70		0			Same as above. Bottom 6" sandy clay with woody material.					
5.0											Wet at bottom.					
5.5																
6.0																
6.5																
7.0																
7.5																
8.0											Boring terminated at 8'					
8.5																
9.0																
9.5																
10.0																
10.5																
11.0																
11.5																
12.0																
Ohio EPA Site Investigation Field Unit (SIFU)																

Appendix G

Well Logs



Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 693135

ORIGINAL OWNER AND LOCATION

Original Owner Name: MULLINS RUBBER

County: MONTGOMERY

Address: 2949 VALLEY ST

City:

Location Number:

Latitude:

Township: MADRIVER

State: OH

Location Map Year:

Longitude:

Section Number: 24

Lot Number:

Zip Code:

Location Area:

CONSTRUCTION DETAILS

Borehole Diameter: 1:

2:

Borehole Depth: 1: 130 ft.

2: 130 ft.

Depth to Bedrock:

Casing Diameter: 1: 6.63 in.

2:

Casing Length: 1: 120 ft.

2: 120 ft.

Casing Thickness: 1:

2:

Casing Height Above Ground:

Date of Completion: 3/28/1989

Driller's Name: LOTT'S WELL DRILLING

Screen Diameter:

Type:

Set Between:

Gravel Pack Material/Size:

Method of Installation:

Grout Material/Size:

Method of Installation:

Aquifer Type: SAND AND GRAVEL

Total Depth: 130 ft.

Well Use: HTG/COOLING

Slot Size:

Material:

Screen Length:

Vol/Wt Used:

Placed:

Vol/Wt Used:

Placed

WELL TEST DETAILS

Static Water Level: 65 ft.

Drawdown: 6 ft.

COMMENTS: NONE

Test Rate: 120 gpm

Test Duration: 3 hrs.

Associated Reports

NONE

WELL LOG

Formations	From	To
TOP SOIL	0	3
DRY GRAVEL	3	32
SAND & GRAVEL	32	51
BLUE CLAY	51	116
SAND & GRAVEL	116	130
WATER AT		51
WATER AT		130

Printing Tips (opens in new window)

Well log questions - Web site questions - Web policies



Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 388390

ORIGINAL OWNER AND LOCATION

Original Owner Name: MULLINS RUBBER PRODU

County: MONTGOMERY

Township: MADRIVER

Address: 2949 VALLEY PI

City:

State: OH

Location Number: 138

Location Map Year: 1983

Latitude: 39.797841

Longitude: -84.13213

Section Number:

Lot Number:

Zip Code:

Location Area:

CONSTRUCTION DETAILS

Borehole Diameter: 1:

Borehole Depth: 1: 111 ft.

Depth to Bedrock:

2:

2: 111 ft.

Casing Diameter: 1: 5.63 in.

Casing Length: 1: 111 ft.

Casing Thickness: 1:

2:

2: 111 ft.

2:

Casing Height Above Ground:

Aquifer Type: GRAVEL

Date of Completion: 6/8/1969

Total Depth: 111 ft.

Well Use:

Driller's Name: LOTTS A E & SON

Screen Diameter:

Slot Size:

Screen Length:

Type:

Material:

Set Between:

Gravel Pack Material/Size:

Vol/Wt Used:

Method of Installation:

Placed:

Grout Material/Size:

Vol/Wt Used:

Method of Installation:

Placed

WELL TEST DETAILS

Static Water Level: 21 ft.

Test Rate: 100 gpm

Associated Reports

Drawdown: 3 ft.

Test Duration: 1 hrs.

NONE

COMMENTS: NONE

WELL LOG

Formations	From	To
TOP SOIL	0	3
DRY GRAVEL	3	36
GRAVEL	36	47
BLUE CLAY	47	111
WATER AT		47

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[Well log questions](#) - [Web site questions](#) - [Web policies](#)



Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 438258

ORIGINAL OWNER AND LOCATION

Original Owner Name: MULLIN RUBBER CO.

County: MONTGOMERY

Address: 2949 VALLEY PI

City:

Location Number: 138

Latitude: 39.797841

Township: MADRIVER

State: OH

Location Map Year: 1983

Longitude: -84.13213

Section Number:

Lot Number:

Zip Code:

Location Area:

CONSTRUCTION DETAILS

Borehole Diameter: 1:

2:

Borehole Depth: 1: 50 ft.

2: 50 ft.

Depth to Bedrock:

Casing Diameter: 1: 5.63 in.

2:

Casing Length: 1: 50 ft.

2: 50 ft.

Casing Thickness: 1:

2:

Casing Height Above Ground:

Date of Completion: 7/11/1972

Driller's Name: LOTTS A E & SON

Screen Diameter:

Type:

Set Between:

Gravel Pack Material/Size:

Method of Installation:

Grout Material/Size:

Method of Installation:

Aquifer Type: GRAVEL

Total Depth: 50 ft.

Slot Size:

Material:

Vol/Wt Used:

Placed:

Vol/Wt Used:

Placed

Well Use:

Screen Length:

WELL TEST DETAILS

Static Water Level:

Drawdown:

COMMENTS: NONE

Test Rate: 50 gpm

Test Duration:

Associated Reports

NONE

WELL LOG

Formations	From	To
TOP SOIL	0	5
DRY GRAVEL	5	25
BLUE CLAY	25	37
GRAVEL	37	50
WATER AT		50


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[Well log questions](#) - [Web site questions](#) - [Web policies](#)

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
EL 774.4		MR106D 1/4
0	TOP SOIL ^(A)	
5		
10		
15	GRAVEL ^(B)	
20		
25		
30	CLAY ^(C)	
35		
40	GRAVEL ^(D)	

(A) Dark brown silt and clay with organic material.	<p><u>LEGEND</u></p>  Well Screen
(B) Well rounded sand, gravel, cobbles and boulders.	
(C) Light gray sandy clay with gravel and cobbles.	
(D) Sand, gravel and cobbles with traces of gray sandy clay.	
(E) Gray sandy clay.	
(F) Fine to coarse sand and gravel.	
(G) Gray shale with weathered zones near top of formation. Limestone bed at 145 feet.	

	Well Bottom
---	-------------

DATE LOGGED	11-04-86
LOGGED BY	KJC,LCH
INTERPRETED BY	DMB

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR106D 2/4
40	GRAVEL (D)	
41		
42		
43		
44		
45		
46		
47		
48		
49		
50	GRAVEL (D)	
51		
52		
53		
54		
55		
56		
57		
58		
59		
60	CLAY (E)	
61		
62		
63		
64		
65		
66		
67		
68		
69		
70	GRAVEL (D)	
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		

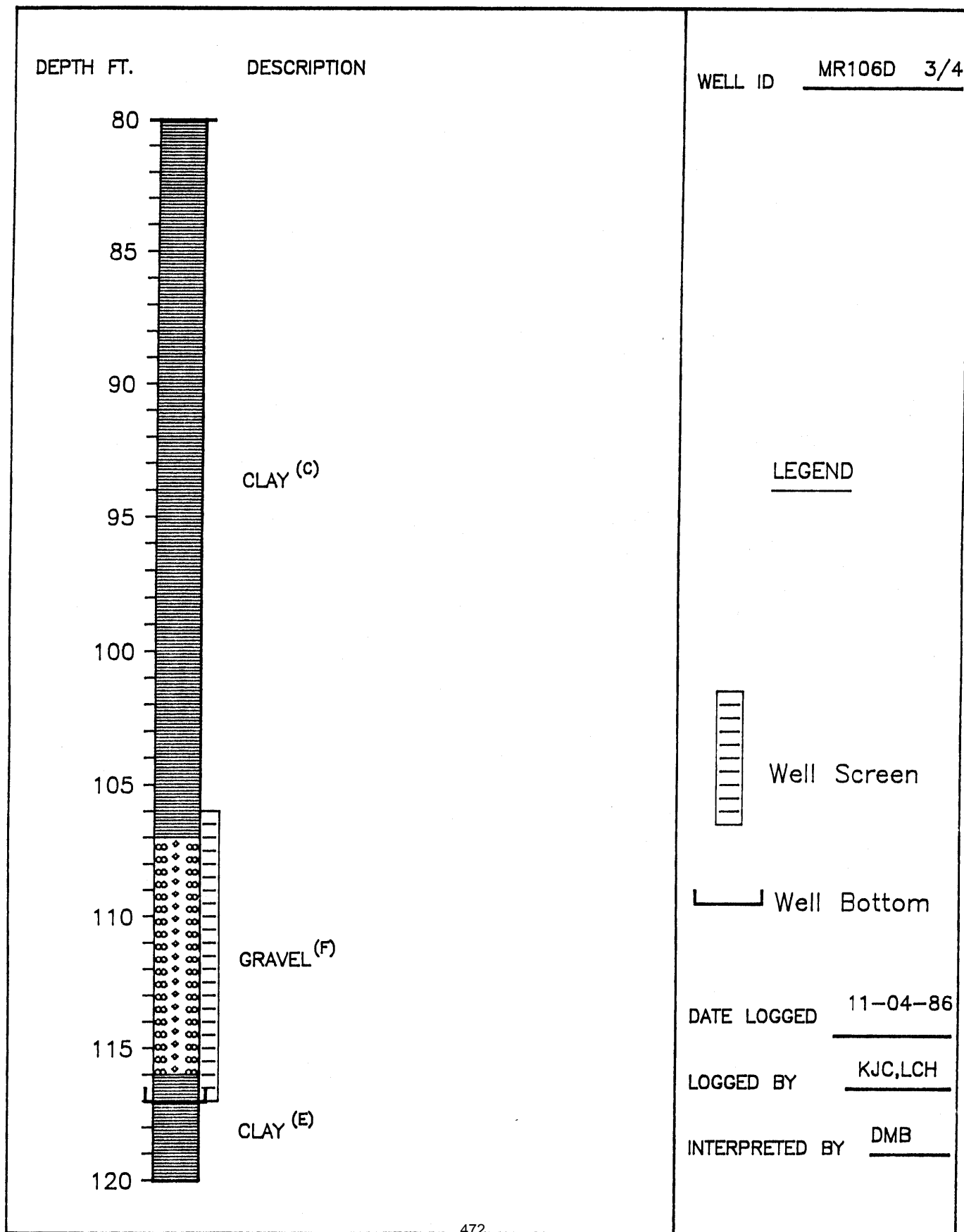
DATE LOGGED 11-04-86

LOGGED BY KJC,LCH

INTERPRETED BY DMB

Geraghty & Miller, Inc.

WELL LOG



Geraghty & Miller, Inc.

WELL LOG


DEPTH FT.	DESCRIPTION	WELL ID
120		MR106D 4/4
125		
130		
135	SHALE (G)	
140		
145		
150		
155		
160		
		DATE LOGGED 11-04-86
		LOGGED BY KJC,LCH
		INTERPRETED BY DMB

Geraghty & Miller, Inc.


WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
EL 771.1		MR105S 1/2
0	FILL	
	(A) Medium gravel with sand.	
5	(B) Medium gravel and sand with lenses of clay.	
10	(C) Light gray sandy clay with gravel.	
	(D) Cobbles and boulders.	
	GRAVEL (A)	
20	GRAVEL (B)	
	CLAY (C)	
25	BOULDERS (D)	
	CLAY (C)	
30		
35	GRAVEL (A)	
40		

LEGEND



Well Screen



Well Bottom

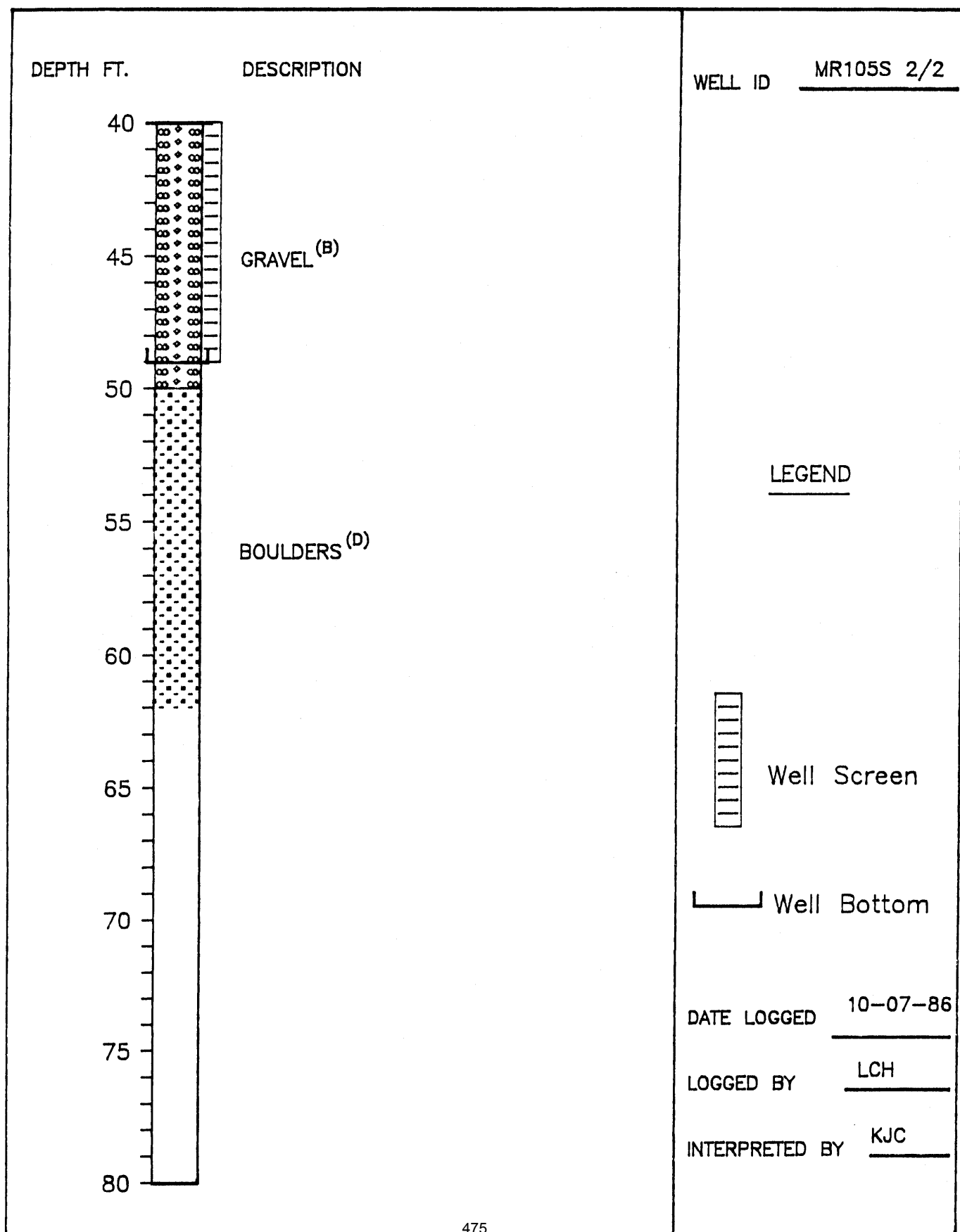
DATE LOGGED 10-07-86

LOGGED BY LCH

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

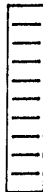



Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
EL 771.1		MR105D 1/4
0	(A) Crushed rock and asphalt.	
5	FILL (A) (B) Well rounded fine to coarse sand and gravel with cobbles.	
10	(C) Light gray, sandy clay.	
15	GRAVEL (B) (D) Light gray sandy clay with interbedded lenses of sand and gravel.	
20	(E) Well rounded, fine to coarse sand and gravel with a trace of clay.	
25	CLAY (C)	
30		
35	GRAVEL (B)	
40		

LEGEND

 Well Screen

 Well Bottom

DATE LOGGED 10-29-86

LOGGED BY KJC

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR105D 2/4
40	GRAVEL (B)	
41		
42		
43		
44		
45	CLAY (D)	
46		
47		
48		
49		
50		
51		
52		
53		
54		
55	GRAVEL (E)	
56		
57		
58		
59		
60		
61		
62		
63		
64		
65	CLAY (D)	
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		

DATE LOGGED 10-29-86

LOGGED BY KJC

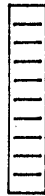
INTERPRETED BY KJC


Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
80		MR105D 3/4
85		
90		
95		
100	CLAY (D)	
105		
110		
115		
120		

LEGEND

 Well Screen

 Well Bottom

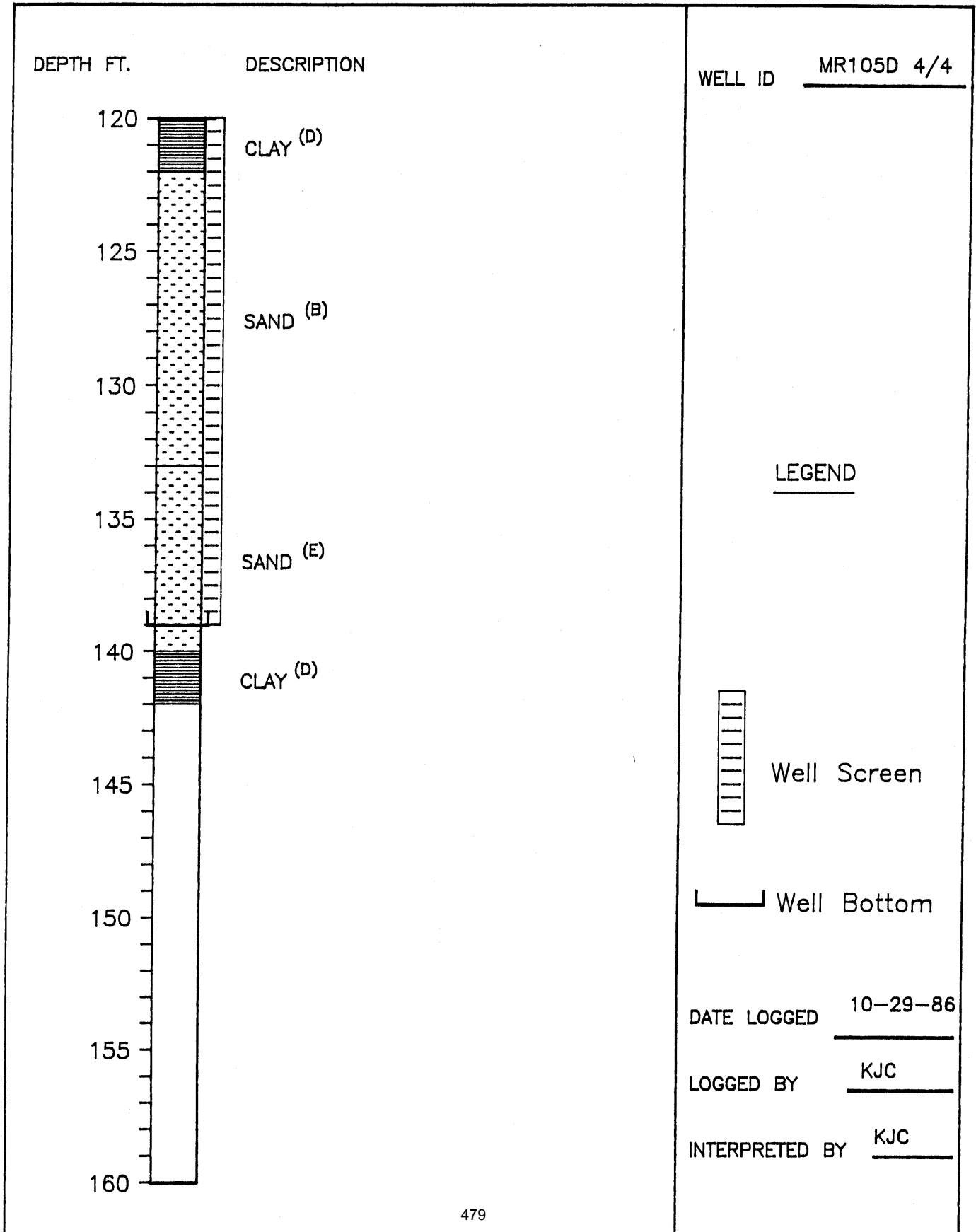
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LOGGED BY KJC

INTERPRETED BY KJC

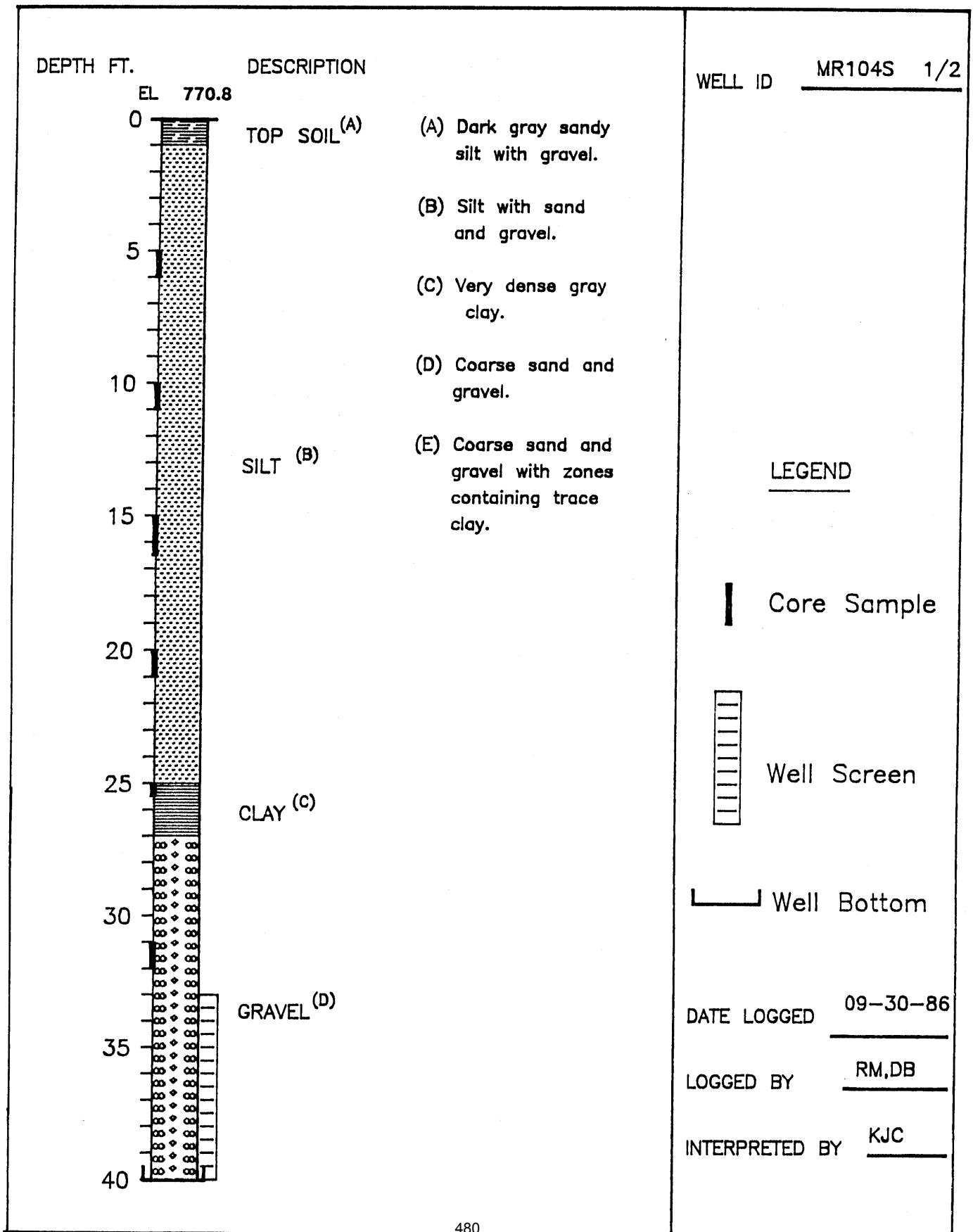
Geraghty & Miller, Inc.

WELL LOG





Geraghty & Miller, Inc.

WELL LOG



Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR104S 2/2
40	GRAVEL (D)	<u>LEGEND</u>
45		
50		
55		
60		
65	GRAVEL (D)	 Well Screen
70		
75		
80		
	GRAVEL (E)	 Well Bottom
		DATE LOGGED 09-30-86
		LOGGED BY RM,DB
		INTERPRETED BY KJC

Geraghty & Miller, Inc.

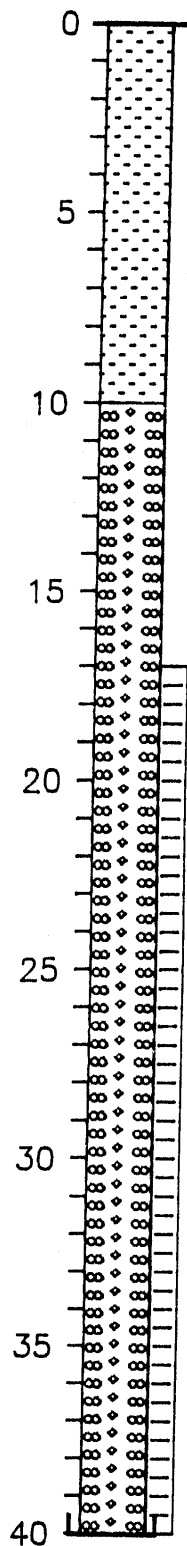
WELL LOG

DEPTH FT.

DESCRIPTION

WELL ID MR103S 1/2

EL 763.9



SAND (A)

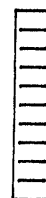
(A) Light brown fine to coarse sand.

(B) Fine to coarse gravel with sand.

(C) Gray clay.

GRAVEL (B)

LEGEND



Well Screen



Well Bottom

DATE LOGGED 10-03-86

LOGGED BY ER,RM

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR103S 2/2
40	GRAVEL (B)	
45	CLAY (c)	
50	GRAVEL (B)	
55	CLAY (c)	
60		
65		
70		
75		
80		

DATE LOGGED 10-03-86

LOGGED BY ER,RM

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

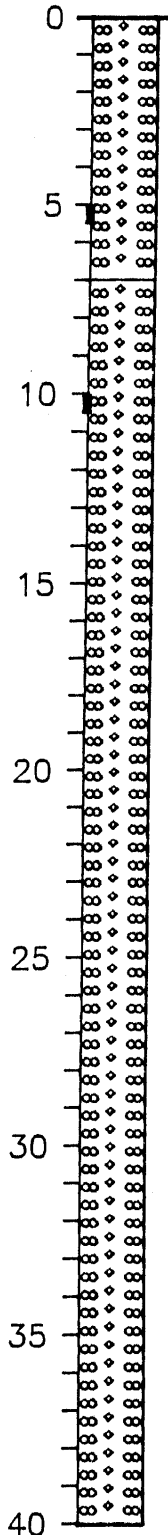
DEPTH FT.

DESCRIPTION

WELL ID

MR103D 1/5

EL 763.8



GRAVEL (A)

GRAVEL (B)

(A) Gravel with intermixed clay.

(B) Coarse sand and fine gravel.

(C) Light gray clay with sand and gravel.

(D) Very coarse sand with gravel.

(E) Gray clay.

(F) Very coarse sand with interbedded clay.

Core Sample

DATE LOGGED 09-29-86

LOGGED BY RM,DB

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR103D 2/5
40	GRAVEL (B)	
45		
50		
55	CLAY (C)	
60		
65		
66	GRAVEL (B)	
70		
75	CLAY (C)	
80		

Core Sample

DATE LOGGED 09-29-86

LOGGED BY RM,DB

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WELL LOG


DEPTH FT.	DESCRIPTION	WELL ID
80	CLAY (c)	MR103D 3/5
85		
90		
95		
100		
105	SAND (D)	DATE LOGGED 09-29-86
110		
115		
120		
		LOGGED BY RM,DB
		INTERPRETED BY KJC


Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
120	SAND (D)	MR103D 4/5
125		
130	SAND (F)	
135		
140	SAND (D)	
145		
150	SAND (F)	
155		
160		

LEGEND

 Well Screen

 Well Bottom

DATE LOGGED 09-29-86

LOGGED BY RM,DB

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
160	SAND (F)	MR103D 5/5
165		
170		
175		
180		
185		
190		
195		
200		

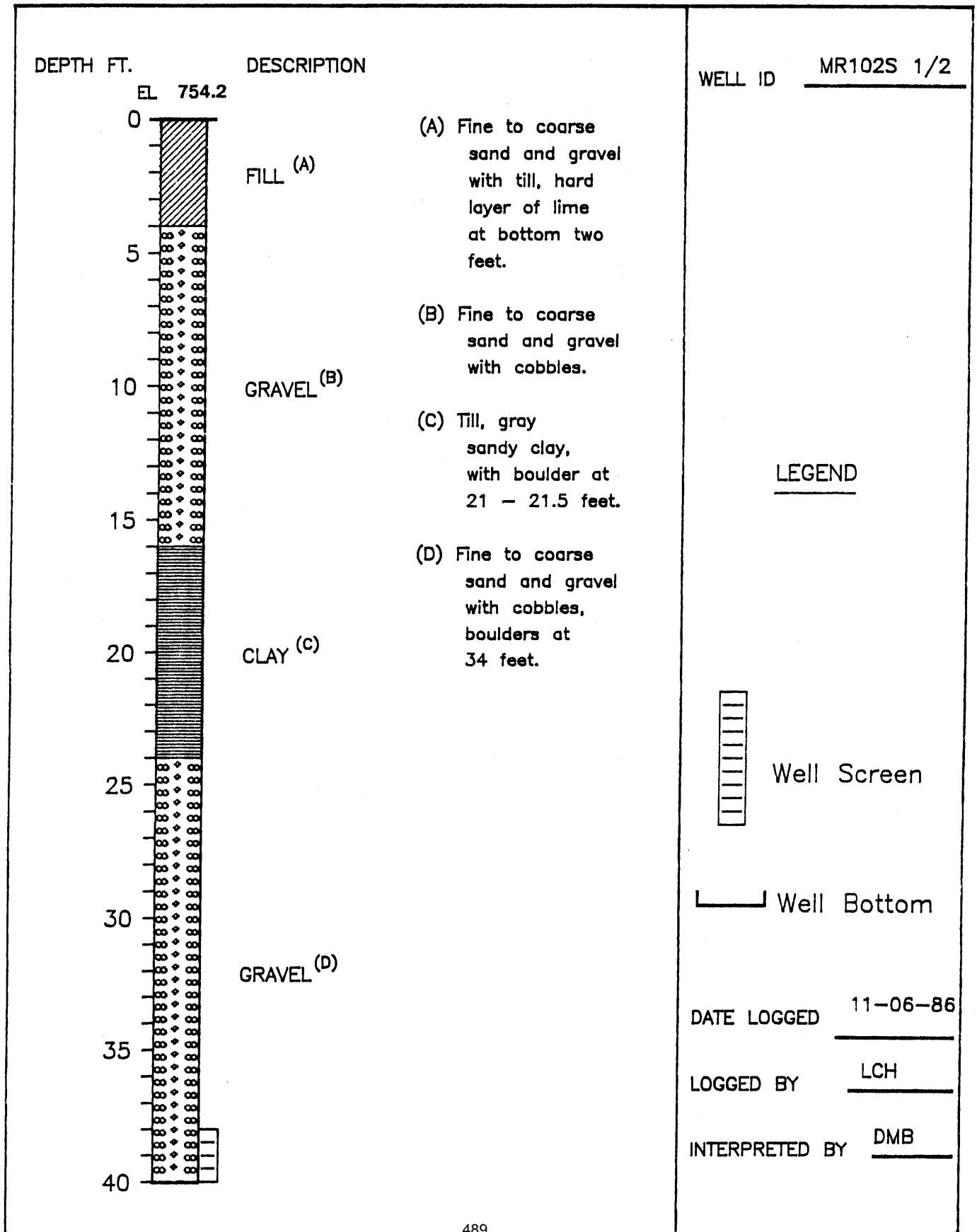
DATE LOGGED 09-29-86

LOGGED BY RM,DB

INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG

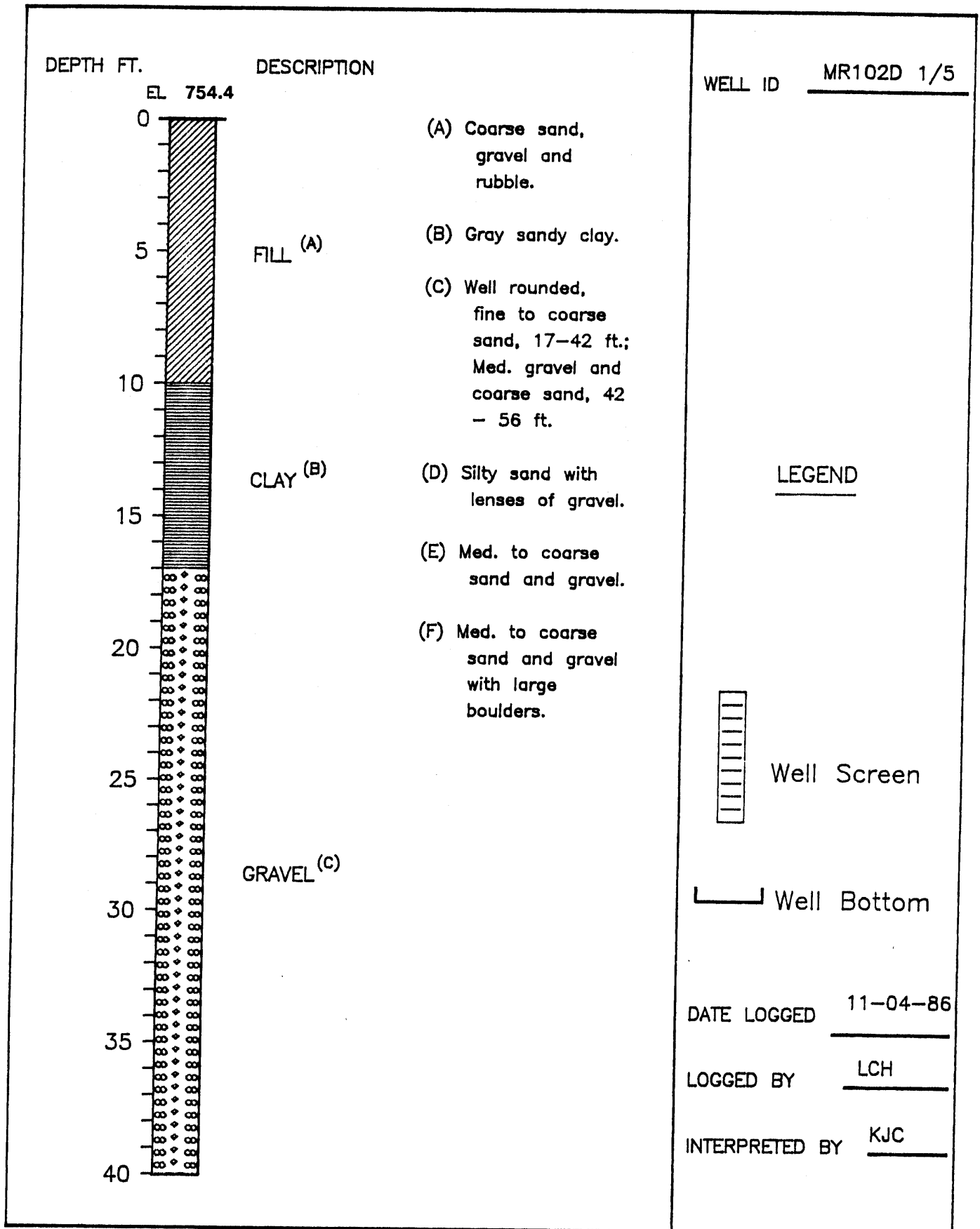


WELL LOG

490
C-8

Geraghty & Miller, Inc.

WELL LOG



Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR102D 2/5
40	(G) Large boulders and cobbles, occasional thin layers clay.	
45		
50	GRAVEL (C)	
55		
60		
65		
70	SAND (D)	
75		
80		
		DATE LOGGED 11-04-86
		LOGGED BY LCH
		INTERPRETED BY KJC

Geraghty & Miller, Inc.

WELL LOG


DEPTH FT.	DESCRIPTION	WELL ID
80	SAND (D)	MR102D 3/5
85		
90		
95		
100		
105		
110		
115		
120		
	GRAVEL (E)	
	CLAY (B)	
	GRAVEL (F)	
		DATE LOGGED 11-04-86
		LOGGED BY LCH
		INTERPRETED BY KJC


Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
120	GRAVEL (F)	MR102D 4/5
125		
130		
135		
140		
145		
150		
155		
160		

LEGEND

 Well Screen

 Well Bottom

DATE LOGGED 11-04-86

LOGGED BY LCH

INTERPRETED BY KJC

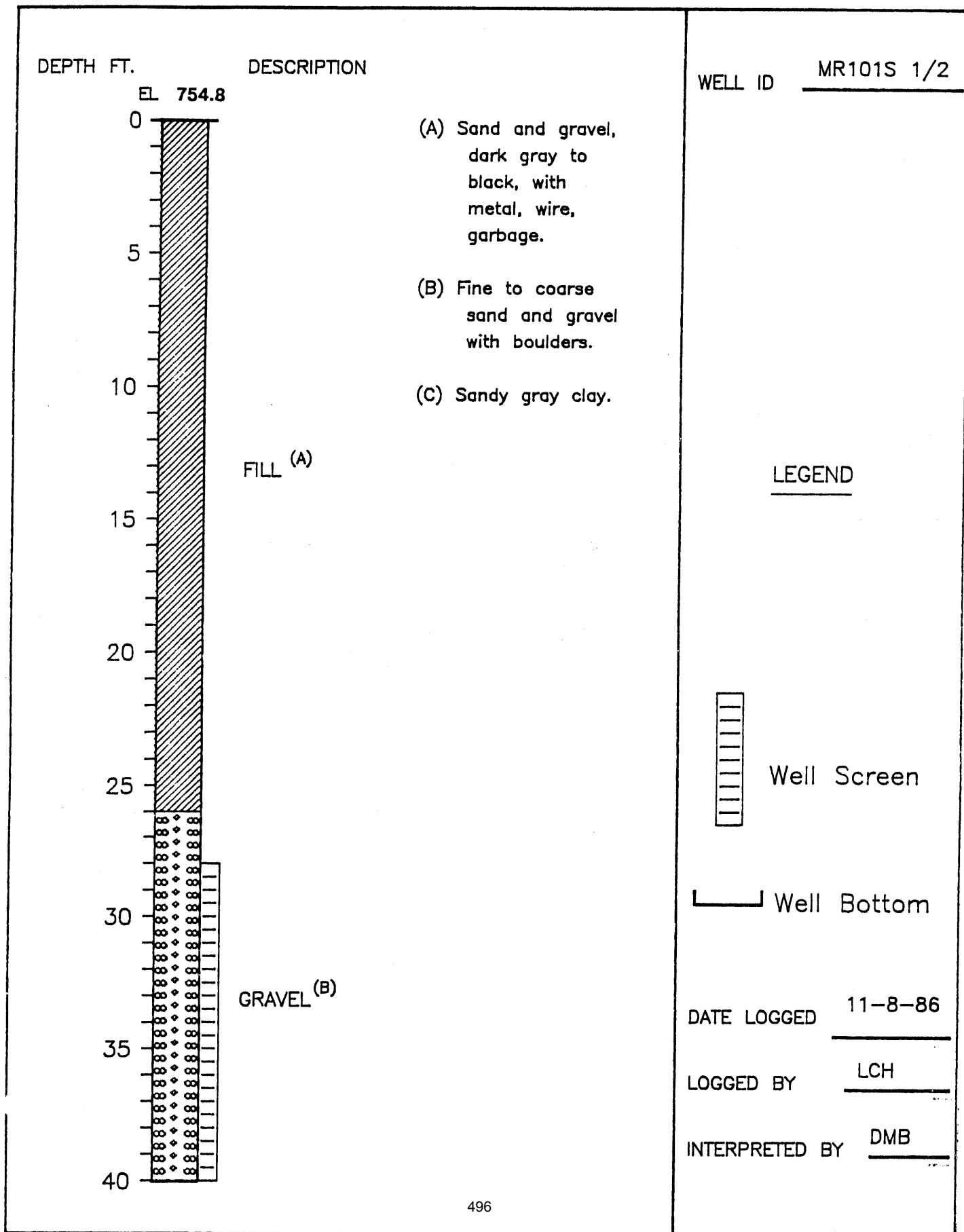
Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
160	BOULDERS (G)	MR102D 5/5
165		
170		
175		
180		
185		
190		
195		
200		
		DATE LOGGED 11-04-86
		LOGGED BY LCH
		INTERPRETED BY KJC

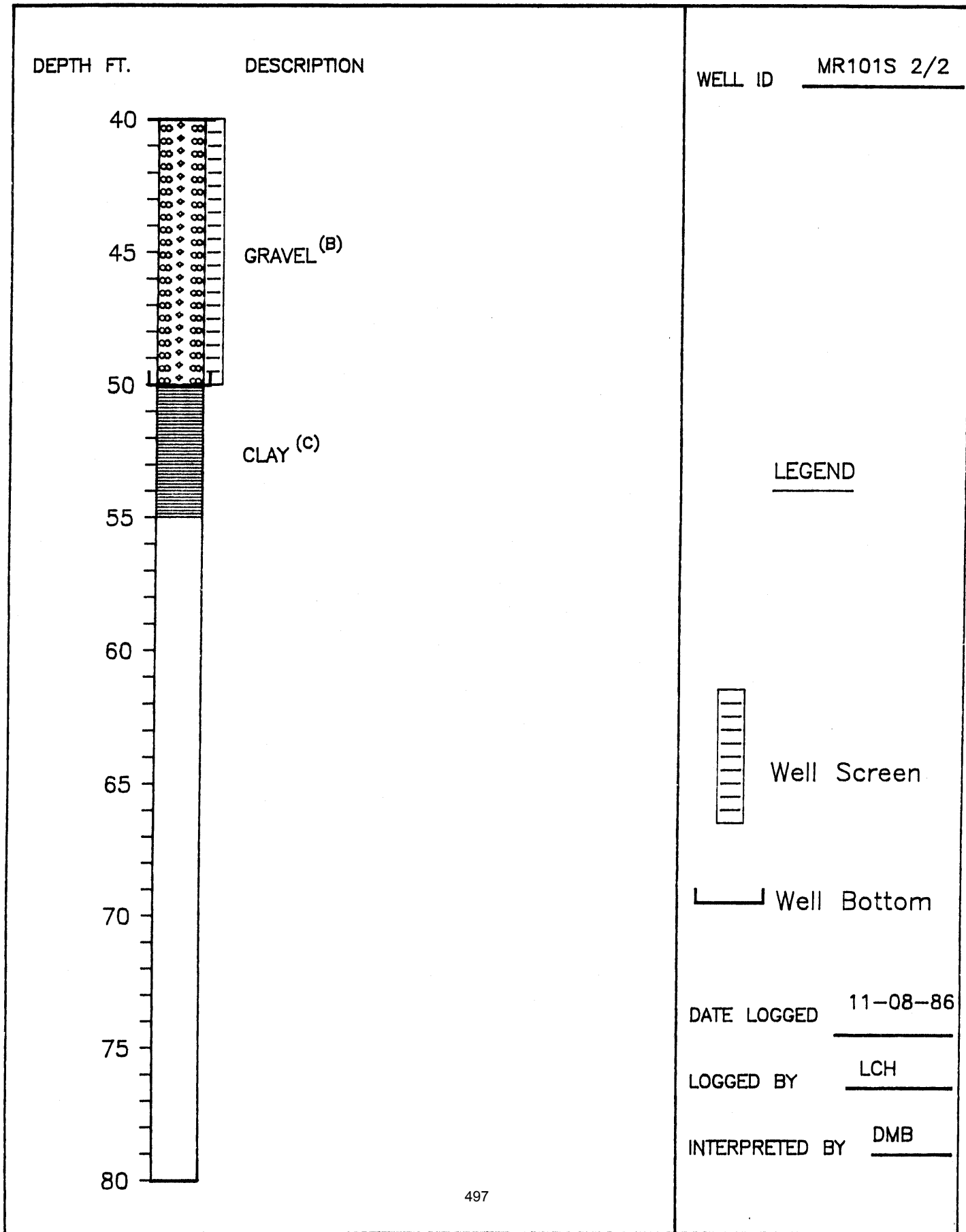
Geraghty & Miller, Inc.

WELL LOG



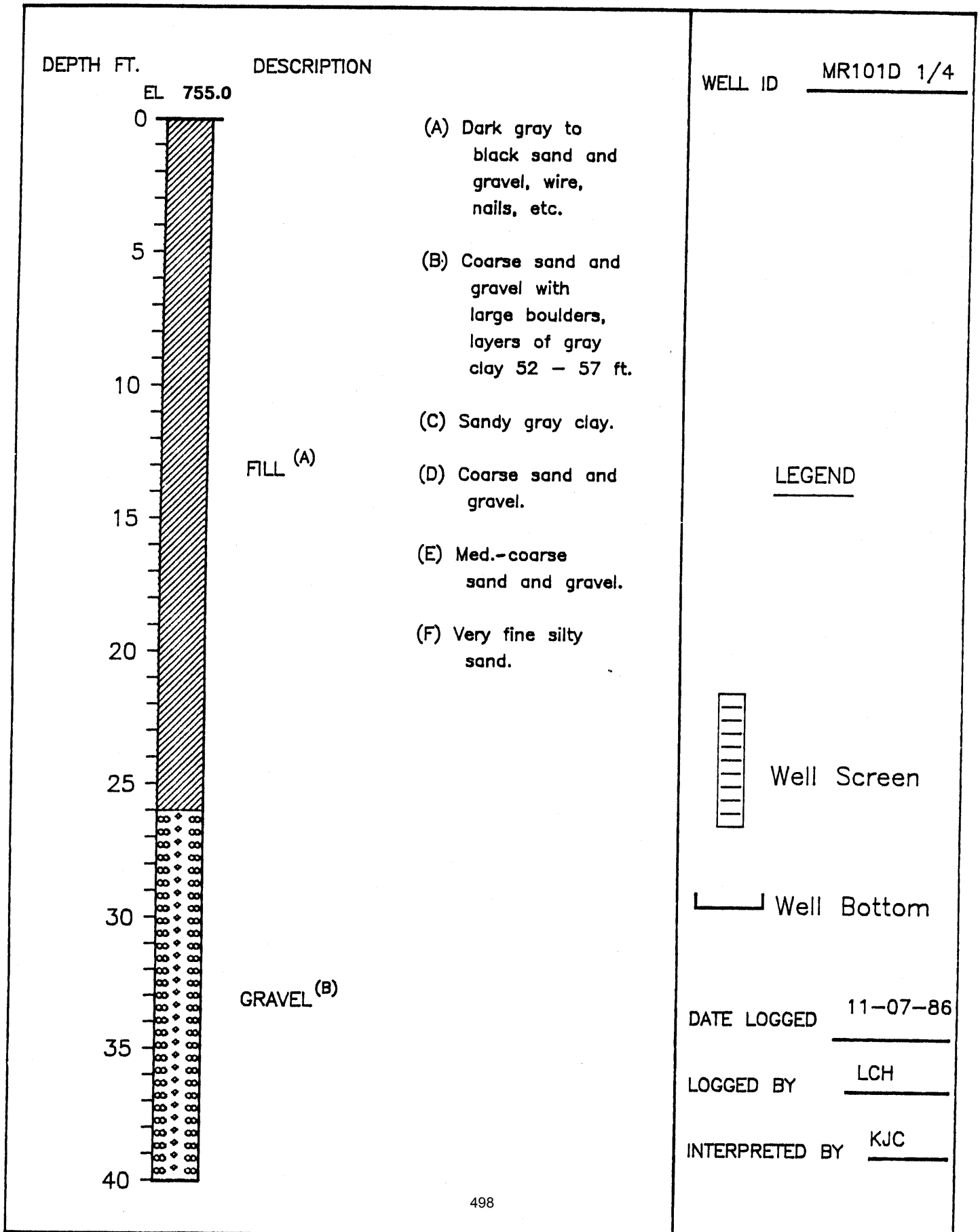
Geraghty & Miller, Inc.

WELL LOG



Geraghty & Miller, Inc.

WELL LOG



Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
40		MR101D 2/4
45		
50	GRAVEL (B)	
55		
60		
65	CLAY (C)	
70		
75	GRAVEL (D)	
	CLAY (C)	
	GRAVEL (E)	
80		

DATE LOGGED 11-07-86

LOGGED BY LCH

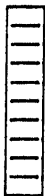
INTERPRETED BY KJC


Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
80		MR101D 3/4
85		
90		
95		
100	GRAVEL (E)	
105		
110		
115		
120		

LEGEND

 Well Screen

 Well Bottom

DATE LOGGED 11-07-86

LOGGED BY LCH

INTERPRETED BY KJC

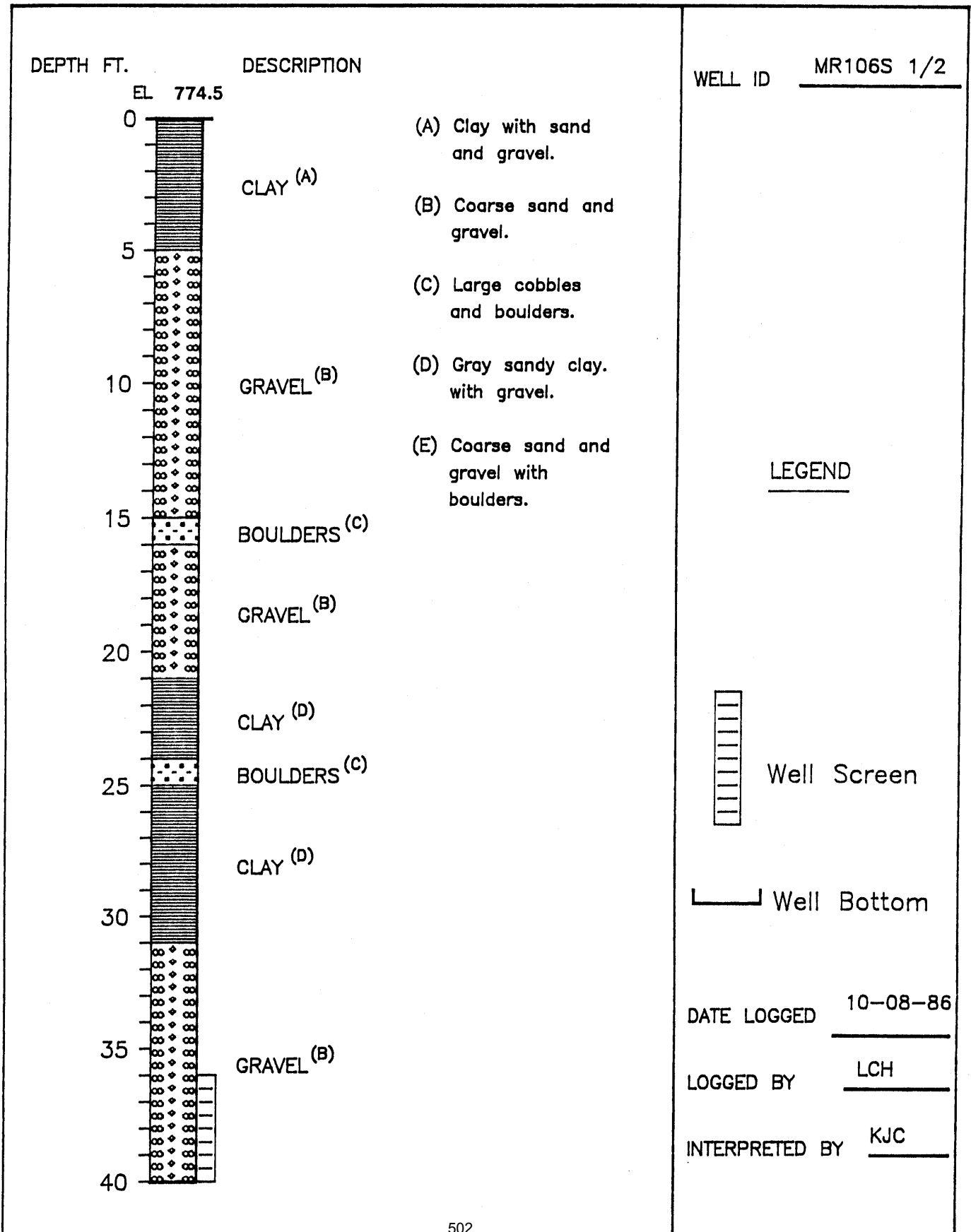
Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR101D 4/4
120	GRAVEL (E)	
121		
122		
123		
124		
125	SAND (F)	
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
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155		DATE LOGGED 11-07-86
156		
157		
158		
159		
160		LOGGED BY LCH
		INTERPRETED BY KJC

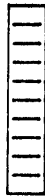

Geraghty & Miller, Inc.

WELL LOG



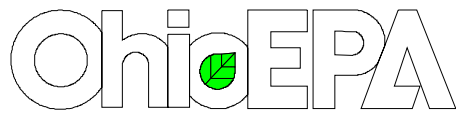
Geraghty & Miller, Inc.

WELL LOG

DEPTH FT.	DESCRIPTION	WELL ID
		MR106S 2/2
40	GRAVEL (B)	<u>LEGEND</u>
41		
42		
43		
44		
45		
46		
47		
48		
49		
50	GRAVEL (E)	 Well Screen
51		
52		
53		
54		
55		
56		
57		
58		
59		
60	 Well Bottom	DATE LOGGED 10-08-86
61		
62		
63		
64		
65		
66		
67		
68		
69		
70	LOGGED BY LCH	INTERPRETED BY KJC
71		
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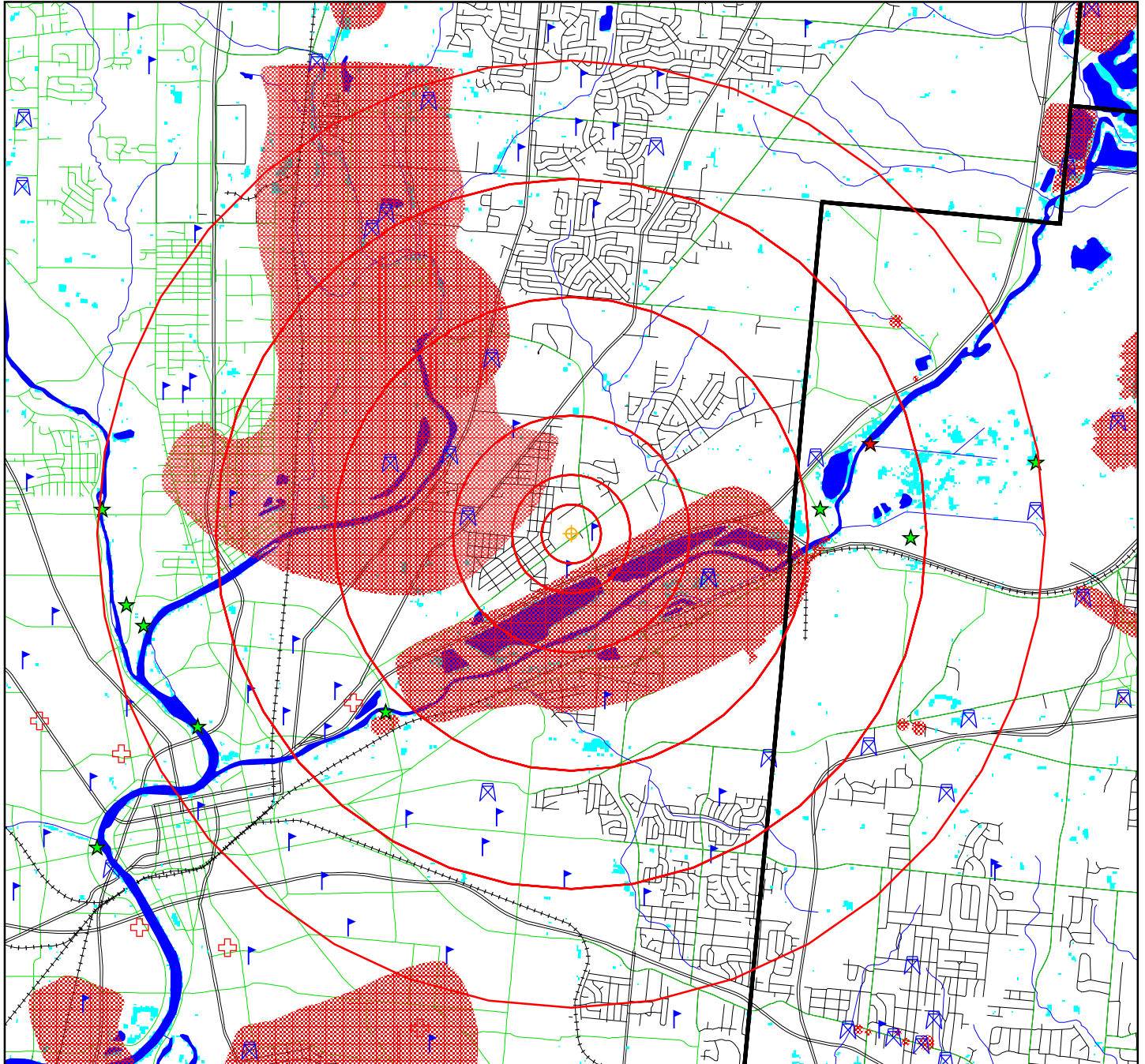
Appendix H

GIS Maps and Tables



Division of Emergency & Remedial Response
GEOGRAPHIC INFORMATION SYSTEM 4-MILE RADIUS MAP

Montgomery County Mullins Rubber Products



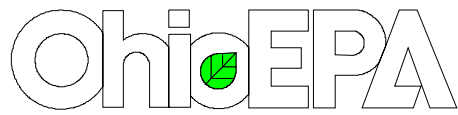
- Site
- School
- Hospital
- Public Surface Water Systems
- Public Ground Water Systems
- US Endangered/Threatened Species
- Ohio Endangered/Threatened Species

- Wetland Area
- Lakes & Ponds
- Wellhead Protection Area
- Limit of Radius From Site
- County Boundaries

- Rivers & Streams
- Railroad
- State and Federal Highways
- Local Roads
- Municipal Roads



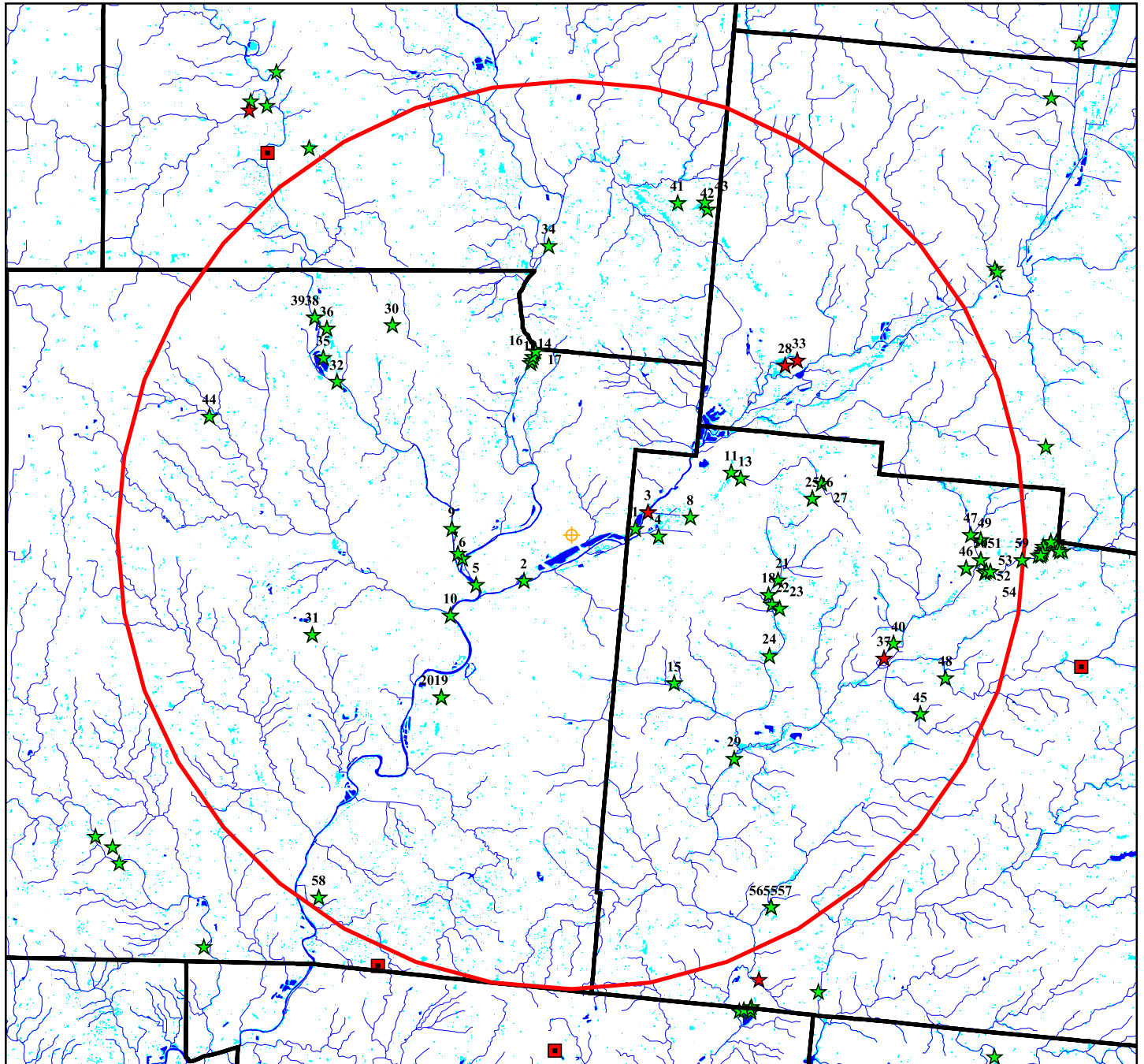
2 0 2 Miles



Division of Emergency & Remedial Response

GEOGRAPHIC INFORMATION SYSTEM 15-MILE RADIUS MAP

NATURAL HERITAGE DATA Mullins Rubber Products



- Site
- US Endangered/Threatened Species
- Ohio Endangered/Threatened Species
- Public Surface Water Systems
 - Community
 - Non-Community/Transient
 - Non-Community/Non-Transient

- Rivers & Streams
 - Wetland Area
 - Lakes & Ponds
 - Limit of Radius From Site
 - County Boundaries
- 4 0 4 8 Miles



**Mullins Rubber Products
Ground Water Systems**

ID	PWS_ID	SYS_TYPE	NAME	ADDRESS	CITY	STATE	DISTANCE	POPULATION
1	5746012	Non-Community/Transient	FIRST FREE WILL BAPTIST	1661 BRANDT PIKE	DAYTON	OH	0.8855	150
2	5700722	Community	DAYTON, CITY OF-OTTAWA P	3210 CHUCK WAGNER LANE	DAYTON	OH	1.2163	236,000
4	5702012	Community	HUBER HEIGHTS-PLANT #1	P.O. BOX 24099	HUBER HEIGHTS	OH	1.2213	29,250
5	5734812	Non-Community/Transient	HUNGARIAN E & R CHURCH	4457 TROY PIKE	DAYTON	OH	1.6236	250
6	5700712	Community	DAYTON, CITY OF-MIAMI PL	3210 CHUCK WAGNER LANE	DAYTON	OH	1.6421	184,000
7	2943512	Non-Community/Transient	DAYTON GYMNASIAC CLUB PA	4301 STATE ROUTE 4	DAYTON	OH	2.1597	300
8	5745612	Non-Community/Transient	BLESSED HOPE BAPTIST CH.	4461 FISHBURG ROAD	HUBER HEIGHTS	OH	2.2948	50
9	5736012	Non-Community/Transient	ORBIT INN/ANIMAL CASTLE	6030 AIRWAY ROAD	DAYTON	OH	2.5237	45
10	5737112	Non-Community/Transient	VOITURE 40-8, 34	4214 POWELL ROAD	DAYTON	OH	3.0740	30
11	2944912	Non-Community/Transient	W.O. WRIGHT'S	3979 COLONEL GLENN HWY.	FAIRBORN	OH	3.0856	75
12	5731212	Non-Community/Transient	CAPT JOHN C. POST LODGE	4275 POWELL ROAD	DAYTON	OH	3.1229	200
13	2902712	Community	HUBER HEIGHTS-PLANT #3	P.O. BOX 24099	HUBER HEIGHTS	OH	3.3449	400
14	2956203	Non-Community/Non-Transient	GREENE COUNTY - FAIRBORN	1122 BEAVER VALLEY ROAD	BEAVERCREEK	OH	3.7010	130
15	5746312	Non-Community/Transient	FELLOWSHIP ALLIANCE CHAP	4585 CHAMBERSBURG ROAD	HUBER HEIGHTS	OH	3.8483	35
16	2951112	Non-Community/Transient	SUBMARINE HOUSE	3899 GERMANY LANE	BEAVERCREEK	OH	3.8514	80
17	2955012	Non-Community/Transient	WPAFB MARKSMANSHIP FACIL	88 ABW/EM 5490 PEARSON ROAD	WRIGHT-PATTERSON	OH	3.9212	50

Mullins Rubber Products

2000 Census Data

RADIUS	TOTAL	WHITE	BLACK	INDIAN	ASIAN	HAWAII_PAC	OTHER
3.00 - 4.00	51,544	44,171	5,013	160	846	25	1,329
2.00 - 3.00	37,833	33,713	2,387	121	439	26	1,147
1.00 - 2.00	15,323	12,505	1,858	48	371	9	532
0.50 - 1.00	3,991	3,586	255	10	50	2	88
0.25 - 0.50	1,297	1,214	47	4	10	0	23
0.00 - 0.25	423	406	7	2	1	0	6
TOTALS	110,411	95,595	9,567	345	1,717	62	3,125

**Mullins Rubber Products
Natural Heritage Data**

ID	STATUS	DISTANCE	SCIENTIFIC NAME	COMMON NAME
1	State Endangered	2.1065	SISTRURUS CATENATUS	EASTERN MASSASAUGA
2	State Endangered	2.1735	GOMPHUS EXTERNUS	PLAINS CLUBTAIL
3	Federally Endangered	2.6325	MYOTIS SODALIS	INDIANA BAT
4	State Endangered	2.8599	SISTRURUS CATENATUS	EASTERN MASSASAUGA
5	State Threatened	3.5509	UNIOMERUS TETRALASMUS	PONDHORN
6	State Threatened	3.6966	DESCURAINIA PINNATA	TANSY MUSTARD
7	State Endangered	3.8067	PENSTEMON LAEVIGATUS	SMOOTH BEARD-TONGUE
8	State Endangered	3.9671	PAPAIPEMA BEERIANA	BEER'S NOCTUID
9	State Endangered	3.9719	EPIOBLASMA TRIQUETRA	SNUFFBOX
10	State Threatened	4.7987	NYCTANASSA VIOLACEA	YELLOW-CROWNED NIGHT-HERON
11	State Threatened	5.6567	BARTRAMIA LONGICAUDA	UPLAND SANDPIPER
12	State Threatened	5.8646	VIBURNUM MOLLE	SOFT-LEAVED ARROW-WOOD
13	State Threatened	5.8913	CAREX MESOCHOREA	MIDLAND SEDGE
14	State Threatened	5.9246	PENSTEMON PALLIDUS	DOWNY WHITE BEARD-TONGUE
15	State Threatened	5.9412	CLEMMYS GUTTATA	SPOTTED TURTLE
16	State Threatened	6.0294	VERATRUM WOODII	WOOD'S-HELLEBORE
17	State Threatened	6.2001	VERATRUM WOODII	WOOD'S-HELLEBORE
18	State Threatened	6.7853	CLONOPHIS KIRTLANDII	KIRTLAND'S SNAKE
19	State Endangered	6.8607	MUHLENBERGIA CUSPIDATA	PLAINS MUHLENBERGIA
20	State Threatened	6.8607	DRABA REPTANS	CAROLINA WHITLOW-GRASS
21	State Threatened	6.9703	CLONOPHIS KIRTLANDII	KIRTLAND'S SNAKE
22	State Threatened	7.0020	SELAGINELLA ECLIPES	MIDWEST SPIKE-MOSS
23	State Threatened	7.2828	CLONOPHIS KIRTLANDII	KIRTLAND'S SNAKE
24	State Threatened	7.6510	CLONOPHIS KIRTLANDII	KIRTLAND'S SNAKE
25	State Threatened	8.0425	SELAGINELLA ECLIPES	MIDWEST SPIKE-MOSS
26	State Threatened	8.0425	TRIGLOCHIN MARITIMUM	SEASIDE ARROW-GRASS
27	State Threatened	8.4327	SELAGINELLA ECLIPES	MIDWEST SPIKE-MOSS
28	Federally Threatened	9.0109	PLATANThERA LEUCOPHAEA	PRAIRIE FRINGED ORCHID
29	State Endangered	9.1189	EPIOBLASMA TRIQUETRA	SNUFFBOX
30	State Threatened	9.1316	BARTRAMIA LONGICAUDA	UPLAND SANDPIPER
31	State Threatened	9.1814	CLONOPHIS KIRTLANDII	KIRTLAND'S SNAKE
32	State Endangered	9.2724	EPIOBLASMA TRIQUETRA	SNUFFBOX
33	Federally Threatened	9.4290	PLATANThERA LEUCOPHAEA	PRAIRIE FRINGED ORCHID
34	State Threatened	9.5945	VERATRUM WOODII	WOOD'S-HELLEBORE
35	State Threatened	10.0863	LIPOCARPHA MICRANTHA	DWARF BULRUSH
36	State Threatened	10.5890	ARABIS HIRSUTA VAR ADPRESSIPILIS	SOUTHERN HAIRY ROCK CRESS
37	Federally Endangered	11.0910	PLEUROBEMA CLAVA	CLUBSHELL
38	State Endangered	11.1394	VILLOSA FABALIS	RAYED BEAN
39	State Endangered	11.1394	EPIOBLASMA TRIQUETRA	SNUFFBOX
40	State Threatened	11.2074	TRUNCILLA DONACIFORMIS	FAWNSFOOT
41	State Threatened	11.5257	TRIGLOCHIN MARITIMUM	SEASIDE ARROW-GRASS
42	State Threatened	11.6507	UTRICULARIA INTERMEDIA	FLAT-LEAVED BLADDERWORT
43	State Threatened	11.8330	CAREX RETROFLEXA VAR RETROFLEXA	REFLEXED SEDGE
44	State Threatened	12.6069	ORCONECTES SLOANII	SLOAN'S CRAYFISH
45	State Threatened	12.9433	SELAGINELLA ECLIPES	MIDWEST SPIKE-MOSS
46	State Threatened	13.0741	ORYZOPSIS RACEMOSA	MOUNTAIN-RICE
47	State Threatened	13.1795	ASPLENIUM RUTA-MURARIA	WALL-RUE
48	State Threatened	13.2187	EXOGLOSSUM LAURAE	TONGUETIED MINNOW
49	State Threatened	13.5031	TRIPHORA TRIANTHOPHORA	THREE-BIRDS ORCHID

**Mullins Rubber Products
Natural Heritage Data**

ID	STATUS	DISTANCE	SCIENTIFIC NAME	COMMON NAME
50	State Threatened	13.5314	ARABIS HIRSUTA VAR ADPRESSIPILIS	SOUTHERN HAIRY ROCK CRESS
51	State Threatened	13.5314	CAREX RETROFLEXA VAR RETROFLEXA	REFLEXED SEDGE
52	State Threatened	13.7044	EXOGLOSSUM LAURAE	TONGUETIED MINNOW
53	State Threatened	13.7444	CALAMINTHA ARKANSANA	LIMESTONE SAVORY
54	State Threatened	13.8785	MATELEA OBLIQUA	ANGLE-POD
55	State Threatened	13.9284	CLEMMYS GUTTATA	SPOTTED TURTLE
56	State Threatened	13.9284	SELAGINELLA ECLIPES	MIDWEST SPIKE-MOSS
57	State Threatened	13.9284	CALAMINTHA ARKANSANA	LIMESTONE SAVORY
58	State Endangered	14.5847	JUNCUS INTERIOR	INLAND RUSH
59	State Threatened	14.9043	ASPLENIUM RUTA-MURARIA	WALL-RUE